

\$1.00

# Jaycar

## ELECTRONICS

ENGINEERING CATALOGUE '88



CSIRO Australia Telescope

132  
PAGES

## Dear Fellow Electronics Enthusiasts

It seems like only yesterday that I wrote the letter for the 1987 catalogue and now it's 1988!

1987 was a great year for us. We achieved our goal of opening in Melbourne — not one store but two! We also purchased a block of industrial land and plan to build our head office and warehouse complex during 1988/89.

Once again we are very proud to present you our catalogue — the 5th edition and by far our best. It includes more products, is more accurate and gives more detail than any of our previous publications.

The emphasis on quality Engineering Grade componentry and kits has never been higher. We are also proud to announce that our range of Australian-assembled kits is larger than ever. Apart from kits we have some great new products, many Australian made. Take the 12V DC-300V AC SINE WAVE Inverter. It is designed and made in Australia and is a worldbeater. As a matter of fact this catalogue is 132 pages of worldbeaters!

On this years cover is an illustration of the construction of the CSIRO Division of Radiophysics Australia Telescope — a Bicentennial project. We all should be very proud of Australia's achievements in radio astronomy. (See below).

## New Magazine

We are very enthusiastic about the arrival in November 1987 of 'Silicon Chip' magazine. As you will see in our kit section, we have supported many 'Silicon Chip' projects with kits. Congratulations to Leo Simpson, Greg Swain and the Silicon Chip staff.

## Mail Orders

Our mail order service has again proved to be very popular during the past year. We note that thousands of customers have saved money (apart from the low cost of our products!) by dialling our toll free order number. If you wish to place an order simply dial 008 022 888 and from anywhere in Australia you can reach us for the cost of a local call. If that number is busy or you want to make an inquiry our mail order hotline is 02 747 1888.

## New stores

We have been given great encouragement by enthusiastic response to our Melbourne stores. Look out for more news in 1988!

## Prices

It is pleasing to be able to say at last that the value of the Australian dollar appears to have stabilised. This is good news for all of us as the price of goods will remain steady. Let's hope it stays that way in 1988!

I would like to personally thank you all for your support. Your recognition of quality products at reasonable prices motivates us to serve you better.

Remember, Jaycar will not be knowingly undersold on any item of the same quality.

Gary Johnston

# COVER PHOTOGRAPH

This photograph was taken late in 1987. It shows (on the front cover of the catalogue) the first fully completed 22 metre antenna handed over in May '87 with 4 others (now complete) on the rear cover. The Australia Telescope is a very ambitious Bicentennial Project and its a great story.

Whilst use of optical telescopes began in 1609 when Galileo first pointed his telescope skyward, Radioastronomy (i.e. the observation of radiation at the longer wavelength of the radio region of the electromagnetic spectrum) did not really begin in an orderly scientific way until the mid 1940's. Interest in this area of scientific activity began in Australia almost immediately.

Australian scientists quickly established themselves as world leaders in this new field. Radiophysicists (as they became known) from the then called CSIR used surplus Radar equipment from WWII initially. Early workers used little more than steerable Yagi's pointed skyward! But later antenna (Radiotelescope) designs improved tremendously in sensitivity and resolution. (Because a Radiotelescope works at a much lower frequency than light, resolving power i.e. the ability to see detail is (was!) a problem).

Our lead was enhanced by contributions from instruments like the Mills Cross Radiotelescope near Canberra and the 64M diameter antenna near Parkes, N.S.W., commissioned in 1961. The Parkes Radiotelescope has proven to be a remarkable instrument. Its most notable achievement has been to actually radio-map large portions of the southern sky. Apart from that it participated in the identification of the first quasar in 1963 and the discovery of complex organic molecules in space.

Apart from actual Radioastronomy, the world saw those first steps on the moon from the Apollo missions thru the transmission via the Parkes Telescope.

But the Parkes Telescope was never designed to last as long as it has. Modern Radioastronomers wanted to "see" radiosources at a much higher frequency than Parkes original design limit and with greater resolution (finer detail). Despite some very successful upgrades the writing was on the wall.

Whilst large single antenna Radiotelescopes can and have been made, they still could not provide the required detail.

A technique called 'Aperture Synthesis' was discovered nearly 40 years earlier. This and other techniques collectively called Earth Rotation Synthesis opened the door for design of Radiotelescopes that would achieve the required resolution. This technique allows a number of receiving antennas at some distance from one another to effectively work as one antenna. The effective aperture (diameter) of the antenna is the distance between the two antennas furthest apart.

In order for the CSIRO Division of Radiophysics to continue first class scientific work it became apparent that a new Radiotelescope needed to be built. A number of proposals were made, but to shorten the story the proposal which came to be known as the Australia Telescope was accepted.

The CSIRO Division of Radiophysics was effectively proposing a telescope with a zoom ratio of 10000 to 1, could distinguish a 10c coin at 1100 Km, could operate over the staggering bandwidth from 327MHz (.917 metre) to 115GHz (2.6mm) and had a resolving power 50 times better than a conventional optical telescope.

This was how they intended to achieve the performance: To construct an array of 6 x 22m diameter receiving dishes, 5 of which to be mounted on 9.6 metre wide railway track 3 Km long at Culgoora (near Narrabri N.S.W.), a 6th dish 3 Km away, one 22 metre fixed antenna at Mopra (near Coonabarabran N.S.W.) and finally to upgrade Parkes to form another element in the array. The 26m University of Tasmania Telescope would be occasionally part of the long baseline as well as the NASA 70m antenna at Tidbinbilla and other telescopes as the occasion may see fit.

The AT is a good example of what can be made in Australia — it has 80% local content. Construction of the AT as it has become known has provided enormous spinoffs for Australian Technology. The CSIRO had to design a special VLSI chip for the correlator. (The correlator is a special computer to process the enormous amounts of data collected by individual antennas). This VLSI chip is a 2.5 micron 16MHz state of the art device.

Apart from that, technology spinoffs in the areas of antenna design, low noise amplifier design, servocontrol design, fibre optic transmission of wide bandwidth, feedhorn design and software design have also occurred.

The Australia Telescope not only gives Parkes a new lease on life until well into the 21st Century. It gives us the most versatile and potentially the most powerful Radiotelescope in the world. This will enable us to conduct quality research which will continue to enshrine our scientific tradition as leaders in the field.

A truly worthwhile Bicentennial gift to Australia.

If you want to receive the newsletter from the CSIRO giving further information on the AT project send \$5.00 to.

AT Countdown Subscriptions  
CSIRO Visitors Centre  
Parkes Radio Telescope  
P.O. Box 276, PARKES 2870  
With your full name and address (all back issues will be supplied).



## 1GHz Digital Frequency Meter

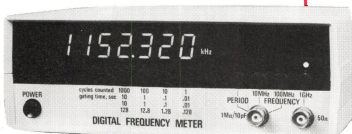
Ref: Silicon Chip November/December 1987

This superb 1GHz Digital Frequency Meter will outperform any other instrument in its price range. It uses the highest performance ICs, provides both frequency and period measurements, switchable gate time, an eight digit readout with switchable decimal points and overflow indication. Kit is complete with laser cut silk screen front panel, anodised punched rear panel and all parts.

### SPECIFICATIONS

**Operational Modes:** Period, frequency to 1GHz, 100MHz, 10MHz • **Frequency Range:** 10Hz-1GHz (1.7GHz typ.) in frequency mode; 10Hz-2.5MHz (5MHz typ.) in period mode • **Gating Times:** 0.01, 0.1, 1 & 10 secs (10MHz & 100MHz ranges); 0.128, 1.28, 12.8 and 128 secs (1GHz range) • **Max Resolution:** 0.1Hz (10MHz range); 1Hz (100MHz & 1GHz ranges); 0.0001us (period mode) • **Display:** High brightness 8-digit LED display, overflow indicator, uSec and kHz annunciators, leading zero blanking • **Sensitivity:** 1m ohm input: better than 20mV RMS from 10Hz to 20MHz; rising to 70mV RMS at 100MHz • **Input Impedance:** 1M ohm input: 1M ohm/10pF for signals less than 1V p-p; 180k ohm/20pF for large amplitude signals • **Typically:** 1M ohm input: 250V RMS for frequencies up to 10MHz (short term only), dropping to 25V RMS at 100MHz • **Accuracy/Stability:** Typical uncalibrated accuracy with a good quality crystal is  $\pm 10$  parts per million (ppm) at 25°C with a temperature stability of  $\pm 12.5$  ppm from -20°C to +70°C • **Power Requirements:** 240V AC 50/60Hz  
Cat. KC-5013

**\$299**



## 50/500MHz Digital Frequency Counter

Ref: EA Dec 1981/Feb 1982

This is a high performance unit that is also easy to build! This design uses just 5 IC's, measure period and frequencies up to 500MHz (with prescaler). It features a bright 7 digit display and outperforms ready built units costing 2 - 3 times more! We believe that the Jaycar version of this kit is by far the best. Not only do we supply 2 x GOLD plated BNC input connectors we supply a special pre-punched heavy plastic front panel that is screen printed in epoxy ink. The assembled unit looks a million dollars! Watch out for kits that only provide cheap front panels. The standard kit will work to 50MHz.

### SPECIFICATIONS

• 0 - 10MHz, 0 - 50MHz & 10 - 500MHz (optional) • Switch selectable frequency or period measurement • 10mV RMS to 30MHz; 100mV RMS @ 50MHz; typically less than 200mV on 500MHz range • 1M ohm/50pF on 0 - 10MHz and 0 - 50MHz ranges; 75 ohms on 10 - 500MHz range • 1Hz on 0 - 10MHz range, 10Hz on 0 - 50MHz range, 100Hz on 50 - 500MHz range • 0.01s, 0.1s, 1s, and 10s; update times 0.2s longer • Typically better than 0.005%  $\pm$  1 count uncalibrated • 240V AC 7 watts  
Cat. KA-1390

PRESCALER - a 500MHz prescaler kit (which fits straight on to the main circuit board) is available....  
Cat. KA-1392

**\$169.50**

**\$46.50**



88 for

## Function Generator with digital readout

Ref: EA April 1982

This attractively housed (matches the KA-1390 DFM) unit produces sine, triangle and square waves over a frequency range from below 20Hz to over 160kHz with low distortion and good envelope stability. It has an in-built 4 digit frequency counter for ease and accuracy of the frequency setting.

### SPECIFICATIONS

**Frequency Range**

**Output Level**

**Output Impedance**

**Waveforms**

**Sine Wave Distortion**

**Square Wave Rise Time**

**Overhoot, etc**

**Readout Accuracy**

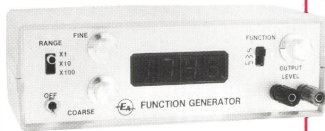
**Amplitude Stability**

**Power Consumption**

Cat. KA-1428

From below 20Hz to 170kHz in 3 ranges  
Continuously variable from 3mV to 2.5V P-P  
600 ohms (nominal)  
Sine, Triangle, Square  
Less than 0.7% at 1kHz, 1% at 10kHz and 2% at 100kHz  
0.4uS (6V/uS at maximum output level)  
Negligible overshoot, droop or ringing  
 $\pm 2\%$   $\pm$  1 digit  
Better than 0.1dB on all ranges  
7 watts at 240V AC

**\$129.50**



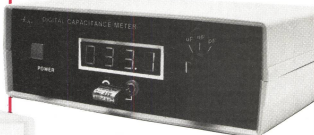
## Upgraded Digital Capacitance Meter

Ref: EA August 1985

Every serious hobbyist should have one. This is the improved version of the very popular March 1980 design. Checks values from 1pF to 99.99uF over three ranges. Now included is a nulling circuit which operates on the uF range as well as the nF and pF ranges and eliminates the 'bobbie' between 0 and 1 that occurred in the old model. Matches our other test equipment kits - Frequency Meter, Function Generator, Power Supplies, etc. Kit also incorporates a bright 4 digit LED display. Simply connect the capacitor to be tested to the input terminals and select the appropriate range. Will test Tantalums as well as electrolytics.

The Jaycar kit includes attractive punched and screened front panel, 3 specially selected capacitors for calibrating unit, box, PCB and all parts.  
Cat. KA-1595

**\$85.00**



**MAIL ORDERS-INQUIRIES 02 747 1888**

Test Equipment Kits

## High Impedance AC/DC Millivoltmeter



Ref: EA December 1987

This easy to build instrument will measure AC and DC signals down to a couple of millivolts, with negligible current loading. This kit is inexpensive to build, has an input impedance of about 7M ohms and a minimum range of 10mV. This makes it an ideal instrument for testing signal paths and offset voltages in circuitry containing op-amps or transistors. Other features included are battery test and meter zero positions and a reverse polarity indicator for the DC ranges. The meter scaling and range switch have been calibrated in 10dB steps. Kit is absolutely complete, box, meter, materials and all components supplied. Cat. KA-1695

**\$46.50**

NEW FOR 88



## Low Distortion Audio Oscillator Metered Version

Ref: EA December 1986

This is the best ultra-low distortion oscillator that Electronics Australia has ever produced. It is comparable with the very best laboratory standard sine wave equipment but by building it yourself you get one for a fraction of their cost. As well as having very low distortion, it has square wave output and excellent envelope stability.

Kit includes pre-punched and silk screened metal front panel, box, meter and all parts. KA-1677

Performance of Prototype

• Frequency Range: 10Hz to 100kHz in 4 ranges • Output Level: 3V RMS max • Attenuator: 0dB, -10dB, -20dB, -30dB, -40dB, -50dB plus fine adjust • Output Impedance: 600 ohms • Output Waveforms: Sine and Square • Sinewave Harmonic Distortion: 20Hz <0.0075%; 100Hz <0.0015%; 1kHz <0.001%; 10kHz <0.002%; 20kHz <0.005%; 100kHz <0.02% • Square Wave Rise and Fall Times: 50ns

Unmetered Version  
Cat. KA-1680  
**\$139**



Unmetered version pictured

## TV Colour Bar Pattern Generator

Ref: EA October 1987

One of our best selling new projects. Easy to build colour bar and test pattern generator, switchable for both servicing and closed-circuit or amateur TV. It provides high performance at a very reasonable cost.

It will provide 8 different patterns and colour bars, red screen, white screen, black screen, cross-hatch, vertical lines, horizontal lines and dot pattern. Synchronisation and blanking are to IRCC (International Radio Consultative Committee) standards. Kit is supplied with laser cut and screened front and rear panel, box, thumbwheel switch, RF modulator and all components except plugpack. Unit requires 12V AC @ 500mA.

Cat. KA-1691

**\$169.00**



## In-Circuit Transistor Tester

Ref: EA September 1983

Have you ever unsoldered a suspect transistor only to find that it checks OK? Troubleshooting exercises are often hindered by this type of false alarm. You can avoid these hassles with the "In-Circuit Transistor, SCR and Diode Tester".

The kit does just that, test drives WITHOUT the need to unsolder them from the circuit! VERY HANDY! The Jaycar kit includes a Jiffy box and Scotch panel showing truth table for device checking.

Cat. KA-1119

**\$21.50**



## Transistor, FET and Zener Tester

Ref: EA February 1988

This handy tester will check the following: Bipolar transistors, junction FETs, Mosfets, Zener diodes, rectifier diodes and detector diodes. Using some ingenuity you can check low power SCRs and PUTs. Testing procedures are clearly outlined in the instructions supplied with the kit.

Kit includes PCB, box, front panel, meter and meter scale and components. Requires 6 x AA batteries. Cat. KA-1698

**\$55.00**



NEW FOR 88



## Zener Diode Tester

Ref: EA July 1979

This handy tester will enable you to actually read the zener voltage of any zener diodes up to 60 volts via your digital multimeter. Now you don't have to decipher those cryptic zener diode part numbers! This tester will also check LEDs.

Supplied in a small Jiffy case with all required parts and instructions. (A multimeter - not supplied - is also required to use this piece of equipment.) Cat. KA-1230

**\$16.95**

## Simple Signal Tracer for Audio & RF Work

Ref: EA August 1985

This simple piece of test equipment enables you to troubleshoot both audio and RF circuits by detecting signal paths. When the signal stops - start looking for trouble! It is portable, battery operated and contains both RF probe and built-in speaker. The Jaycar kit includes coils, probe and other components necessary to build this project.

Cat. KA-1220

**\$27.95**



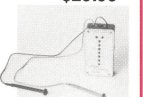
## Voltage and Continuity Tester

Ref: EA November 1987

This handy voltage and continuity checker belongs in every toolbox. It tests AC and DC voltages and also continuity in wires and cables. It will measure 6V, 12V, 24V, 48V, 110V, 240V and 415V, both AC and DC. There is also a polarity indication, and in the case of AC, both polarity LEDs will light up. Whenever a voltage is measured there is also a "beep" tone. The continuity tester is selectable by a switch. The continuity of a wire is indicated by an audio visual signal: both a beep and a glowing LED.

The kit is complete with box, Scotch panel, probes, PCB and all parts. Cat. KA-1694

**\$29.95**



## TURN YOUR SURPLUS STOCK INTO CASH!!

Jaycar will purchase your surplus stocks of components and equipment. We are continually on the lookout for sources of prime quality merchandise.

**CALL GARY JOHNSTON OR BRUCE ROUTLEY NOW ON (02) 747 2022**

## Capacitance Adaptor for your DMM

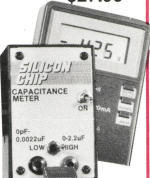
Ref: Silicon Chip Nov '87

This clever adaptor circuit plugs directly into your digital multimeter. Then simply plug the unknown capacitor into the test terminals and read the value in picofarads (pF) or microfarads ( $\mu$ F) directly from the digital display. Ideal for checking suspect or unmarked capacitors and to select critical values.

It will measure values up to 2.2 $\mu$ F in two ranges 0 - 2200pF (0.0022 $\mu$ F) and 0 - 2.2  $\mu$ F. Don't be worried by the 2.2 $\mu$ F upper limit - capacitors with values greater than 2.2 $\mu$ F are usually clearly marked and seldom require testing.

Kit includes PCB, all components, box and Scotchcal front panel. Cat. KC-5010

**\$27.95**



## Low Ohms Tester for DMM

Ref: Silicon Chip Feb '88

This low ohms tester plugs straight into the terminals of your digital multimeter, and can accurately measure resistance values from 1k ohm down to 0.01 ohm. There are many situations where accurate low resistance measurements are necessary. These include checking meter shunts, designing loudspeaker crossover networks and amplifier output stages, servicing power supplies and any circuitry where low value resistors are used. Kit includes PCB, box, front panel, banana plugs and terminals and all components.

SV 216 type battery required. Cat. KC-5023

**\$29.95**



## Low Cost Temperature Probe for Multimeters

Ref: EA January 1988

This is an easy to build temperature probe which adapts a multimeter or electronic voltmeter into a general purpose thermometer. Great for measuring the temperature of heatinks, transistors, if Johnny has a fever, etc.

Prototype was tested from -20°C to 120°C at 1% accuracy. The best thing about this kit is its low price. Complete with PCB all components, box and Scotchcal panel. Requires 9V battery. Aluminium tube not supplied.

Cat. KA-1696

**\$19.95**



## Kits for Model Railway Enthusists

*Impressive model railway kits from EA - just check out what these kits do and then check out the cost of buying the ready built units - you'll be amazed!!*

### "RAILMASTER" Pulse-Power Train Controller

Ref: EA September 1984

This is a state-of-the-art train controller offering tremendous features:

- Variable simulated inertia
- Full short circuit protection including both audible and visual indications
- Power and track monitoring indicators
- Adequate power for double and triple heading locos
- Fixed 12V DC and 15V AC power for lighting and accessories
- Optional walk-around throttle

The Jaycar kit includes realistic Scotchcal front panel and special console case only available from us. We believe you'll be delighted with this kit.

Cat. KA-1560



**\$109.95**



### Optional Walk-around Controller

Cat. KA-1559

**\$13.95**

### Diesel Sound Simulator

Ref: EA November 1984

This project mounts inside a model train (i.e. goods wagon) and produces a sound similar to a diesel locomotive. The 'speed' varies according to the throttle action for added realism.

All listed parts provided.

Cat. KA-1561

**\$22.50**

### Steam Sound Simulator

Ref: EA December 1984

Build this realistic steam sound simulator for your model railway layout. It features an infra red optical switch to synchronise the 'chuffs' to the wheel rotation. Like the KA-1561 diesel sound simulator, it picks up power from the tracks.

All specified components supplied including 32 ohm headphone type transducer Cat. KA-1562

**\$22.50**

### Model Railway Lighting Controller

Ref: EA February 1987

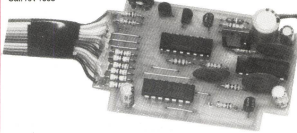
This project basically detects a train by a photodiode and IR LED across a section of track. The circuit will then drive flashing lights for level crossings, school pedestrian crossings, etc. It will even drive up to 4 sets of red/amber/green traffic lights!

The Jaycar kit includes the PCB with power supply regulator, enough LEDs (around 10) for operation in its standard format and other board components. It is an ideal project for model railway enthusiasts.

Requires 7 - 9V AC adaptor

Cat. KA-1563

**\$21.95**



**CARLINGFORD 872 4444**





## Playmaster/Jaycar 60/60 Blueprint Amplifier

new for

**IT LOOKS SO GOOD YOUR FRIENDS  
WON'T BELIEVE YOU BUILT IT!**

Ref: EA Magazine May, June, July 1986

We now have a "Blueprinted" version of the Playmaster 60/60. We believe the "Blueprint" represents a significant improvement in the development of this project. Dual diagonally wound C-Core power transformer. Endorsed in writing (with each kit) by EA. Slightly higher power rating than toroid power transformer (which is in the standard kit). For lower noise, metal film 1% 50ppm resistors are now supplied where 5% carbon type were originally specified. Power supply filter capacitors - doubled! That's right, the Blue-print has 4 x 4700µF/63V capacitors instead of the 4 x 2200µF types in the standard version. This significantly improves power supply performance. Special extruded heatsink. The heatsink section is machined from a heavy section extruded aluminium section. It is then black anodized. The standard heatsink is folded sheetmetal not anodized. Special high quality pre-etched PCB - Special front panel treatment - graphics emphasise Blueprint treatment.

### 150 WATTS PLUS MUSIC POWER!

"For short term power capability (Music Power), as measured by the Institute of High Fidelity specification IHF-A-207 the amplifier can deliver 105 watts into an 8 ohm load for a single channel, and no less than 153 watts into a 4 ohm load under the same conditions"

### FEATURES OF THE 60/60

\* 60 Watts per channel with both channels driven into 8 ohm loads \* Very low noise on phono and line level inputs - better than CD performance \* Very low harmonic and intermodulation distortion \* Excellent headroom \* Tape monitor loop \* Tone controls with centre detent and defeat switch \* Mono/stereo switch \* Easy-to-build construction \* Very little wiring

### PERFECT CD PLAYER COMPANION

Hum and noise levels for line level input is actually better than any currently available CD player at 100dB plus. You can't hear a thing with your ear right on the speaker cone and the volume up full! The volume control is calibrated "CD Clip" at a level corresponding to 2V signal level or full amp output power with CD player input.

### BEGINNER CONSTRUCTORS CAN BUILD THIS AMP

If you can use simple hand tools and a soldering iron you can build this project. The designers at EA believe (as we do) that many 1,000s of audio enthusiasts, with little or no electronic constructor experience would want to build this amp - so it's designed on one large printed circuit board. Virtually everything is board mounted i.e. even input sockets and switches! There is no shielded wire, in fact there is only a handful of soldered connections external to the PCB. So by simply following the step-by-step instructions and inserting components with the pre-drilled PCB and soldering, the amp is thus constructed.

**YOU WILL BE PROUD OF THE RESULT AND IT WILL LAST A LIFETIME.**

### PERFORMANCE SPECIFICATION

**Power Output** (One channel) 4 ohms 88W, 8 ohms 74W **Power Output** (Both channels) 4 ohms 72W, 8 ohms 62W **Harmonic Distortion** Less than 0.01% for all powers - to 60W into 8 ohm loads; Less than 0.015% for all powers to 70W into 4 ohm loads **Intermodulation Distortion** Less than 0.01% for all powers to 60W into 8 ohm loads; Less than 0.012% for all powers to 80W into 8 ohm loads **Frequency Response** Phono inputs - RIAA/IEC equalisation within  $\pm 0.5$ dB from 40Hz to 20kHz - Line level inputs - 0.5dB at 20Hz and -1dB at 20kHz **Input Sensitivity** Phono inputs at 1kHz - 4.3mV (overload capacity at 1kHz - 140mV - line level inputs - 270mV **Hum and Noise** Phono (with respect to 10mV at 1kHz) -89dB unweighted; with typical moving magnet cartridge. High level inputs (with respect to 270mV) -103dB unweighted with 20Hz to 20kHz bandwidth **Tone Controls** Bass  $\pm 12$ dB at 50Hz; Treble  $\pm 12$ dB at 10kHz **Damping Factor** At 1kHz and 30Hz - greater than 80 **Stability** Unconditional

"This new amplifier offers a standard of performance far ahead of anything we have previously published and ahead of most commercial integrated stereo amplifiers".

"It is half for one third the cost of an imported amplifier with equivalent power output and performance".

Says Leo Simpson former Managing Editor of Electronics Australia Magazine

### BLUEPRINT

Cat. KA-1652

**\$369.00**

### STANDARD VERSION

Cat. KA-1650

**\$329.00**

## AM/FM Stereo Synthesised Tuner



Ref: EA December 1985 - February 1986

This tuner will outperform any commercially available tuner REGARDLESS OF PRICE. We could not say that unless it was true.

As well as getting an FM stereo section which is at least as good as any synthesised tuner ever built. It is the only unit featuring a genuine wideband low distortion AM stereo (CQUAM) tuner! Not only do you get that you get digital frequency readout, 12 station memory, automatic station seek and an optional infra red remote control.

### JAPAN EAT YOUR HEART OUT!!

This design is one every Australian can be proud of! It has no peer anywhere else in the world - and you can have one. The metalwork is an exact replica of the prototype as are all of the very difficult-to-obtain components.

We sincerely hope you will recognise the significance of an Australian "home grown" product which is a world beater.

### SPECIFICATIONS

#### AM TUNER

**Tuning Range**  
**Freq. Response**  
**Harmonic Distortion** Mono

**Audio Output**

**Stereo Separation**  
**AGC Range**  
**S/N Ratio**

522 to 1611kHz  
-3dB @ 5.5kHz  
0.4%  $\pm$  30% modulation  
Stereo  $\pm$  1%  $\pm$  30% modulation  
450mV RMS into 4.7 ohm load  
 $\pm$  100% modulation  
Typically 30dB

40dB for a 6dB change in audio output  
70dB with respect to full output for signal levels of 9 and 10  
on bar graph display, better than 60dB with respect to full output for signal levels greater than 6 Usable Sensitivity 350uV  $\pm$  -6dB audio level

#### FM TUNER

**Tuning Range**  
**Freq. Response**  
**Harmonic Distortion**

**Audio output**

**Stereo Separation**  
**Subcarrier Product Rejection**  
**19kHz Rejection**

87.9 to 107.9MHz  
-1dB  $\pm$  20Hz, -0.5dB  $\pm$  15kHz  
Mono 0.15% (100Hz) 0.15% (1kHz) 0.2% (6kHz)  
Stereo 0.4% (100Hz) 0.4% (1kHz) 0.4% (6kHz)  
450mV RMS into 4.7k ohm load  $\pm$  100% mod  
34dB (50Hz) 34dB (1kHz) 36dB (10kHz)  
48dB  
62dB

Cat. KA-1635

**\$599.00**

## Remote Control

Ref: EA April 1986

**\$99.50**

For that final touch of luxury on your Playmaster stereo AM/FM tuner you need the infra red remote control. With this you can sit back and select any of the 12 programmed stations at will or tune to any FM or AM station with the up and down tuning buttons. Cat. KA-1636



**CARLTON 872 4444**

# 5000 Power Amp "Black Monolith" Re-born with Topology Modules

Ref: ETI Jan-March '81 and AEM April '87

Jaycar proudly re-introduce the fantastic 5000 series power amplifier with the new "state of the art" Topology Power Modules.

## What IS the difference?

Whilst we are sceptical, some people feel that Mosfet sound is 'harsh'. Good engineering back in 1979/80 produced a fine design in the 5000 series amp. This design is still valid but, in deference to the (many) people who were critical of Mosfet sound he reassessed the whole Mosfet amp design philosophy. He redesigned the amp, but a vast amount of engineering time was also spent producing the best possible subjective performance. The design uses the same Hitachi 2SK134/2S449 Mosfets with new features viz: a fully symmetric voltage amplifier stage driven by a cascade differential pair which employs both bipolar transistors and a dual J-FET. This overall circuit topology was selected only after a great deal of experimentation and was found to give the best subjective performance of the various topologies tried during the development.

"Black Monolith" is the special name that we apply to the special treatment that we give to the full 5000 Series Power Mosfet Amplifier. The performance of this amplifier is astonishing (see specs), in keeping with the "No Compromise" performance, Jaycar has set out to produce a kit which has no peer. The Jaycar "Black Monolith" is WITHOUT DOUBT the best 5000 amplifier kit on the market today AT ANY PRICE. There have been imitations but none have the features of this kit.

## Laboratory Measured Performance

Power Output Around 100W RMS into 8 ohms (both channels driven) Frequency Response 5Hz to 20kHz,  $\pm 0.4\text{dB}$ ; 2.8Hz to 65kHz,  $\pm 0.3\text{dB}$  Note: these figures are determined solely by passive filters Input Sensitivity 1V RMS for 100W output Hum -100dB below full output (flat) Noise -116dB below full output (flat 20kHz bandwidth) 2nd Harmonic Distortion  $<0.001\%$  at 1kHz (0.0007% on prototypes) at 100W output using a  $\pm 50\text{V}$  supply rated at 4A continuous  $<0.003\%$  at 10kHz and 100W 3rd Harmonic Distortion  $<0.0003\%$  for all frequencies less than 10kHz and all powers below clipping Total Harmonic Distortion Determined by 2nd harmonic distortion (see above) Intermodular Distortion  $<0.0003\%$  at 100W (50Hz and 7kHz mixed 4:1) Stability unconditional Cat. KE-4200

**\$499.00**

## GET THE UPGRADED MODULE PERFORMANCE FOR THE SAME PRICE AS THE OLD 5000 AMP!

## ALREADY HAVE A 5000 AMP?

UPGRADE IT with the AEM 6005 100 watt 'Ultra Fidelity' topology Mosfet Amp Module!

Ref: Australian Electronics Monthly April 1987

David Tilbrook, the original designer of the 5000 amp (Jaycar "Black Monolith" 5000 amp kit sales 3000+) has designed a retrofit module which enables you to upgrade your old 5000 amp to the latest design philosophy 'Ultra Fidelity'

The Jaycar kit includes the new PCB all board parts, including fresh heatsink grease, new jig-primed heatsink, etc. Note that the Hitachi Mosfets 2SK134/2S449 (2 of each) are not supplied as you will have these when you dismantle the old 5000 (477) boards. These devices are available separately as new parts 2SK134 Cat. ZT-2454 \$9.95 and 2S449 Cat. ZT-2449 \$9.95.

THE DIFFERENCE IN PERFORMANCE WILL STAGGER YOU! Cat. KM-3056 (Supplied without Mosfets)

**\$79.50 per channel**

## BETTER PERFORMANCE THAN EVER



NEW FOR

CONCORD 745 3077



## "Ultra Fidelity" Preamplifier



Ref: AEM October - December 1985

## The definitive Preamplifier by David Tilbrook

"The input noise figures subsequently obtained are significantly better than the best op-amp designs and exceed the specifications of the best commercial amplifiers."

David Tilbrook, AEM October 1985

The AEM6010 design is on a purist philosophy being that the less you put in the signal path the less likely you are to distort it. The aim of the project was to design unit that would challenge the finest commercial designs. It has been designed with the accent on acoustic performance. Its dynamic range, noise, distortion and frequency response characteristics are extremely good. But just as important to the acoustic performance are such parameters as channel separation, power supply regulation, freedom from dynamic distortion mechanisms and maintenance of the integrity of the signal earth line. Inputs include MM or MC cartridge, CD, two tuners - AM and FM, auxiliary - (Hi Fi VCR, etc). The kit is housed in a deluxe metal cabinet featuring heavy gauge brass - finished front panel with matching knobs.

Power supply requirements. Unit needs 30-35 volts i.e.  $\pm 30\text{V}/0.30\text{V}$ , if with the 5000 power amp, the secondary power outputs in the 5000 are wired in series and will comfortably supply the preamp. If used on its own a toroidal transformer 300/030 is recommended. We have available the actual one used in the 6000 amp Cat. MT-2191 \$49.95.

KM-3030

**\$359.00**

## AEM6000 Series Power Amp Modules



Ref: AEM June - July 1986

The amplifier modules for the unbelievable 6000 power amplifier are now available separately. What more can we say than to list the specs. Supplied with PCB, all components including Mosfets and heatsink bracket.

## SPECIFICATIONS:

- Supply Voltage: 50-0-50 to 75-0-75 volts • Power Consumption:  $<300\text{mA}$  at idle • Output Power 50-0-50 Supply:  $>100\text{W}$  into 8 ohms;  $>150\text{W}$  into 4 ohms • Output Power 75-0-75 Supply:  $>240\text{W}$  into 8 ohms;  $>360\text{W}$  into 4 ohms • Damping Factor:  $>300$  (100Hz);  $>300$  (1kHz);  $>100$  (10kHz) all 8 ohm • Frequency Response: (determined by passive input filters only) • Optional Input Capacitor (Fitted):  $0.01\text{dB}$   $\pm 20\text{Hz}$   $\rightarrow 25\text{kHz}$ ;  $\pm 0.05\text{dB}$   $\pm 10\text{Hz}$   $\rightarrow 18\text{kHz}$ ;  $\pm 0.3\text{dB}$   $\pm 4\text{Hz}$   $\rightarrow 130\text{kHz}$  (Not Fitted):  $0.01\text{dB}$  dc to  $\pm 25\text{kHz}$ ;  $\pm 0.05\text{dB}$  dc to  $\pm 48\text{kHz}$ ;  $\pm 0.3\text{dB}$  dc to  $\pm 130\text{kHz}$  • Total Harmonic Distortion 8 Ohm Load: 100Hz  $<0.005\%$  @ 1W;  $<0.005\%$  @ 10W;  $<0.005\%$  @ 100W;  $<0.005\%$  @ 200W for all frequencies from 100Hz through 10kHz • Signal to Noise Ratio re Full Power Output with a 200 ohm Source Impedance Connected: 400Hz - 20kHz noise bandwidth  $\rightarrow 118\text{dB}$  A-weighted; 20Hz - 20kHz noise bandwidth  $\rightarrow 105\text{dB}$  A-weighted • Total Equivalent Input Noise: 20Hz - 20kHz noise bandwidth  $\rightarrow 5.3\text{uV}$  A-weighted i.e.  $<103\text{dBm}$  A-weighted • Slew Rate (input filter removed):  $>60\text{V}/\mu\text{sec}$  Cat. KM-3044

**\$119.00**

## 5000 Series 1/3 Octave (28 Band) Graphic Equaliser



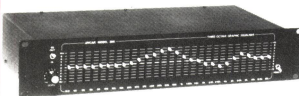
This kit enables you to control 28 narrow bands of frequencies between 31.5Hz and 16kHz. By being able to do this you will be able to very effectively compensate for acoustic deficiencies in any indoor environment. The third (i.e. 3 controls per octave) equaliser has been chosen for the 5000 system as most professional equalisation is done by third octave units. It gives total control over listening environment. The Jaycar kit includes fully pre-punched and plated chassis, pre-punched heavy gauge front panel, anodised and silk screened to match the other 5000 Series components. It is original to the ETI design (Jaycar supplied the prototypes) but includes refinements such as quality IC sockets, UNBRAKO front panel fixing screws and matching brushed finish black anodised level control. Each unit is mono, two units will be required for stereo operation.

### SPECIFICATIONS

Signal to Noise	-102dB with respect to 1V
Freq. Response	12Hz - 105kHz to -1dB
Boost/Cut	14dB (28dB total)
Distortion	100Hz (0.007%)
	1kHz (0.007%)
	10kHz (0.008%)
	(essentially irrespective of boost or cut)
Current Consumption	Approx 100mA @ ±15V (requires 30V AC CT*)

\*This power is available from the rear of the 5000 power amp

Cat. KE-4204 **\$219.00**



## 1/3 Octave Equaliser 2801

### FULL "ROAD" QUALITY

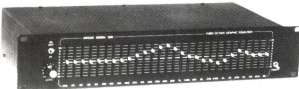
Jaycar is renowned for their famous 2801 third Octave Equaliser. Many, many hundreds of these units are giving reliable service in all parts of Australia and overseas. People recognise the value of this unit when they can get one for less than half the price of the cheapest ready built unit - with no deterioration in performance!

We are proud to say that our new design is based on the Series 5000 third octave unit. The specs on this updated 2801 are unknown on units under \$1,000!! The 2801 MkIII comes complete with fused power supply for 240V AC operation. It is also fitted with standard Cannon male/female chassis connectors for ease of professional use. It is output short circuit proof and will drive very long unbalanced lines without degradation.

Naturally it comes in a 19" rugged, road quality rack cabinet. The 2801 MkIII looks almost the same as the third octave 5000 unit except that it has brand new front panel livery.

Cat. KJ-6531

**\$239.00**



## 2010 MkIIA Stereo Equaliser (1 Octave)

### THE FAMOUS JAYCAR 2010

If you can't afford to pay for 2 third 5000 octave equalisers then the 2010 might be for you. The 2010 is an octave (i.e. one control per octave) equaliser. (Octave centre frequencies, 31, 62, 125, 250, 500, 1k, 2k, 4k, 8 & 16kHz). This still gives you tremendous room equalisation.

The 2010 also features separate level controls for right and left channels, and a multitrack pushbutton mode switch. You can, for example, equalise both recording and playback when dubbing from disc to tape or tape to tape as well as equalise bypass for A-B comparisons. Each control gives you a ±12dB of adjustment and otherwise has similar performance levels to the 5000 unit.

Supplied in a pre-punched 95mm (2 rack unit) cabinet which matches the 5000 system. Looks good on its own.

Cat. KJ-6535

**\$169.00**



## Parametric Equaliser

Ref: ETI July 1986

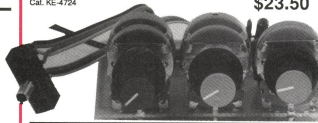
This module can be used on its own or in ganged to equalise a whole system. Parametric equalisers are different to graphic equalisers. 'Parametrics' can be made to tune around a centre frequency whereas 'graphics' have a fixed centre frequency. This tuning effect generally means that the number of equalisers in a signal line can be reduced (reducing distortion) and they are more versatile. The Jaycar kit is supplied with all board components including the potentiometers, knobs switch and TL071 IC.

### BRIEF SPECIFICATIONS

Range of Centre Frequencies	20Hz to 19kHz
Range of Q	1 to 10
Cut	-23dB
Boost	+18dB
Roll Off	15dB/octave

Cat. KE-4724

**\$23.50**



## One Octave Equaliser Module



Ref: AEM December 1987

This kit is a ten band graphic equaliser that delivers top performance at an affordable price. Ideal for many of our amplifier modules as well as PA and sound reinforcement applications. The centre frequencies have been set to industry standards: 32Hz, 64, 125, 250, 500, 1kHz, 2, 4, 8 and 16kHz. Kit includes two PCBs, one for electronics and one for the sliders. Power requirements +15V, -15V. Short form kit, no box or hardware. 10 slider pots included.

### SPECIFICATIONS

• Boost & Cut 12dB • Frequency Response 10Hz to 100kHz ±0.3dB (Controls centre) • THD 0.008%, 20Hz-10kHz (with respect to 1V ip signal) • S/N Ratio 105dB A-weighted (with respect to 1V ip signal) • Voltage Gain Approx 5, i.e. 14dB (Controls centre)

Cat. KM-3064

**\$59.95**



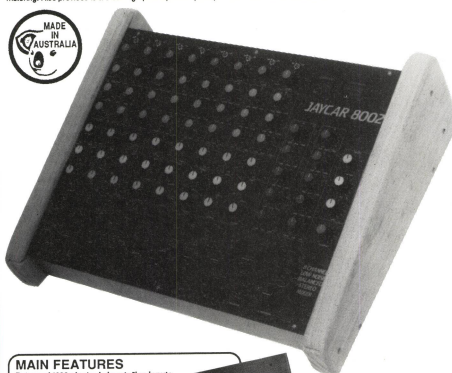


# 8 Channel Audio Mixer

Ref: EA April/May 1983

The Jaycar 8002 mixer was originally conceived to be the successor to the very popular ETI 414 Master Mixer. The 414 was basically configured as a "stage" mixer and suffered from a number of severe technical limitations - notably poor signal-to-noise figures. Enormous advances in audio IC's have occurred since the 414 was designed. Jaycar engineers have taken advantage of this. The incredibly low noise and distortion figures of the 8002 are a testimony to the sound basic design of the mixer coupled with the performance capabilities of these IC's. Whilst the 8002 is the ideal 8 channel compact stage mixer, other applications have been kept in mind. The 8002 front panel measures 19" wide x 14" high (8 rack units). This enables the 8002 to be mounted into PA equipment racks if necessary. Strictly speaking, the chassis is not needed in this configuration although the chassis is also rack mountable.

The 8002 can also console mount with attractive heavy timber end-pieces adding to the appearance of the unit. Powerful "Sends" capability is built in to this mixer. Both special effects (echo) for example) and feedback for the stage performers can be sent from any one or all of the 8 input channels. Fully variable calibrated sends attenuators are provided on each channel. Sends can be panned across the stereo image to create spectacular sonic effects. You could, for example, pan a pre-recorded tape of steam trains rushing from the right hand side of the stage - across - and exit stage left with this facility. Balancing sorts the real mixers out from the toys. With the 8002 you can take either a microphone level input or a line level input into any of the 8 channels. An input selector switch is provided at the top of the mixer panel. Another attenuator is provided at this point to prevent overload of the input circuitry should the incoming signal prove to be higher than normal microphone or line levels. Each input channel has 3 band equalisation capability with a massive 12dB boost or cut. A pan control enables each input channel to be positioned left thru right across a stereo image. Inputs out of stereo position on a stage can be positioned in the mixer. Finally a quality 60mm slider fade control is provided. We felt that in keeping with the professional nature of the instrument that the extra resolution that the larger control offers is warranted. The left and right monitor channels have VU metering. Also provided is a 5 band graphic equaliser (+9dB), master fobback send is also provided.



## MAIN FEATURES

- Balanced (600 ohm) mic input/line inputs
- Input attenuators
- Cannon connectors included in the price
- Bass, mid and treble equalisation on each input
- "Effects" (i.e. echo, etc) capability
- Fobback on all 8 inputs
- Stereo pan on all 8 inputs
- 60mm slide faders used throughout
- 19" rack mount capability (or console mount)
- Professional black front panel with format borders
- Multicoloured knobs to assist function identification
- Designed for quick and easy service
- VU metering
- Only high quality components used
- 5534A OP amps used for low noise and very low distortion

## RACK KIT

This is the basic mixer. This kit gives you virtually all the electronics. Provided - front panel, VU meters, 11 PCB's, all potentiometers (rotary and slide), knobs, components for PCB's, hook-up wire, etc. All Cannon XC connectors are included as well. It is ideal for rack mount and all that is necessary is a  $\pm 15V$  1A power supply. Cat. KJ-6504

**\$595.00**

## DESK CONSOLE

This kit consists of console chassis, power supply including fuses, power lead, etc. and wooden end pieces. It enables you to mount the rack kit for conventional desk use. Cat. KJ-6505

**\$119.00**

**Jaycar  
8002**

## Technical

S/N microphone input -75dB  
with ref to +4dBm • S/N line  
input -90dB with ref to +4dBm  
• Line out level +4dBm (0VU)  
• Distortion 0.005% • Power  
requirement 240V AC 50Hz  
25 watts

## Input Module

This unit consists of all parts  
necessary to construct one input.  
(Eight of these are in the KJ-6504).  
Supplied are all rotary pots and  
knobs, the 60mm slider and the  
3 pole toggle switch as well as the  
PCB and PCB components.  
Cat. KJ-6503

**\$55.00**

## Sum Amp, 5 Band Eq/Driver Module

Two of these are used in the  
standard 8002.  
This unit has a sum amp which  
accepts (and adds) the levels from  
the input modules, provides 5  
band equalisation as well as  
driving balanced and unbalanced  
lines. VU metering is also provided.  
All controls, knobs, PCB and parts  
provided.  
Cat. KJ-6506

**\$55.00**

## Fobback/ Effects Sends Module

One of these is used in the 8002,  
however, more can be easily used  
in a custom configuration. This  
unit enables you to take buffered  
fobback from the mixer and also  
allows you to mix the effects (such  
as a digital delay line, reverb, etc)  
back into the line. Once again all  
parts supplied.  
Cat. KJ-6507

**\$37.50**

## 8002 Power Supply Module

This provides a stable, regulated,  
low noise  $\pm 15V$  @ 1A for the mixer.  
Will power up to 8 input modules.  
Cat. KJ-6509

**\$39.50**

**HURSTVILLE 570 7000**

Mixer Kit

## 50 and 100W Amp Modules with Polyswitch Speaker Protection

**Ref: Silicon Chip December 1987**

These high power amplifier modules give very low distortion and noise. They also feature footproof protection against short-circuits and loudspeaker damage. Silicon Chip has looked hard at past amplifier designs and have come up with the definitive solution for those who need rugged reliable sound without breaking the bank.

A particular feature of these amps are their low distortion, 0.05% for the 50 watt, 0.1% for the 100W version for the entire frequency range 20Hz to 20kHz at all power levels up to maximum. Hi tech speaker protection devices are used in these amps. Fuses and relays are not the answer. Its polyswitches. These are positive temperature coefficient thermistors with very low resistance. When the current through a polyswitch goes high it immediately switches to a high resistance state and stays until the fault condition is removed. Its like a fuse which can repair itself. As far as we know, this is the first time that PTC thermistors have been incorporated into an amplifier design to give comprehensive protection.

### PERFORMANCE OF PROTOTYPES

• Output Power: 50W into 8 ohms (50W ver) 100W into 4 ohms (100W ver) • Frequency Response (at 1W): 20Hz-100kHz  $\pm 1\text{dB}$  (50W ver) 20Hz-50kHz  $\pm 1\text{dB}$  (100W ver) • Harmonic Distortion (20Hz-20kHz) 0.05% (50W ver) 0.1% (100W ver) • S/N Ratio (both) 100dB • Protection 2A fuses • RDE115 polyswitch (50W ver) and 3A fuses plus RDE245A polyswitch (100W ver) • Damping Factor without polyswitch 50 (50W ver) and with polyswitch 30 (50W ver) for 100W version factors are both 100 • Stability (both) unconditional

As polyswitches are optional we have not included them in the kit price. Kits include PCB, all components (less polyswitches) and heatsink bracket.

### 50 WATT

Cat. KC-5018

**\$32.95**

RDE115 thermistor to suit

Cat. RV-3415

**\$8.95 each**

### 100 WATT

Cat. KC-5019

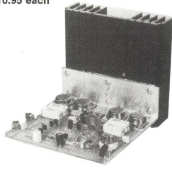
**\$38.95**

RDE245A thermistor to suit

Cat. RV-3418

**\$10.95 each**

**\$99.80 for  
stereo 100W  
modules with  
full speaker  
protection**



## ETI 480 Series Amplifier Modules

**Ref: ETI December 1976  
& ETI's 30 Audio Projects**

### ETI 480/100

A complete audio amplifier on a single board. Just add a power supply and you have a 100 watt Hi Fi Musical Instrument or PA amplifier! Use it with the KE-4014 Mixer/Preamp for instrument or PA. Kit contains metal bracket, all PCB items and instructions. Legendary performance at a modest price. Cat. KE-4052

**\$34.50**

### ETI 480/50

Same circuit as the 480/100 except less output transistors, half the power and a little cheaper. Great if you don't need 100 watts. All parts supplied.

**\$27.50**

Cat. KE-4050

Suitable transformer 28-0-28V @ 2A

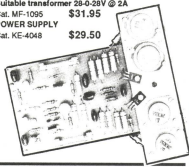
Cat. MF-1095

**\$31.95**

POWER SUPPLY

Cat. KE-4048

**\$29.50**



## Universal Mosfet Amplifier Modules AEM 6500 60/120 Watts

**Ref: AEM July 1985**

Designed by MOSFET Guru David Tilbrook these easy to construct modules give you either a power amplifier with 60 watts rms or 120 watts rms power depending on the number of final transistors used. They are easy to build and inexpensive. They are ideal for PA, Hi Fi or anything really. They are especially suited as individual speaker drivers in active crossover systems.

The Jaycar kit consists of the board and relevant parts, heatsink bracket (drilled) and instructions.

### 60 WATT

Cat. KM-3010

**\$59.50**

### 120 WATT

Cat. KM-3012

**\$79.50**

### SPECIFICATIONS

• Power Output

Depends on power supply and configuration, max

100W RMS into

8 ohm load

• Frequency

Response

Flat within  $\pm 0.4\text{dB}$

from 8Hz to 20kHz

• Input Sensitivity

1.2V rms for 100W

out • Noise -100dB

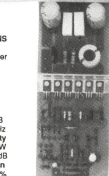
• Intermodulation

Distortion 0.003%

at 100W • Stability

Unconditionally

stable



## ETI 499 150 Watt Mosfet Amp Module

**Ref: ETI March 1982**

At last, a high performance amplifier with the stability and reliability of MOSFETs. Genuine 150 watts rms with power supply components on board. You need only connect a power transformer (4361 type Cat. MM-2015) and heatsink.

The Jaycar kit

Includes a

magnificent jig

drilled

EXTRUDED heat-

sink bracket for

greater thermal

efficiency

Cat. KE-4220

**\$109.50**

## 300 Watt Playmaster Amplifier

**Ref: EA June 1980**

This rugged design produces 200 watts rms into 8 ohms and 300 watts rms into 4 ohms. All parts fit on a single PCB. It also features comprehensive protection circuitry, and will even withstand short circuits for short duration without adverse effect. Unlike other high powered amps it is unconditionally stable. It will not therefore break into supersonic oscillations, overheat and fail.

### SPECIFICATIONS

• Power Output 4 ohm 300 watts rms 8 ohm

200 watts rms • Freq. Response 20Hz - 20kHz

• 1dB • Harmonic Distortion 0.1% 4 ohm 150

watt 0.02% 8 ohm 100 watt • Input Sensitivity

1.5V @ 47k ohm • Hum & Noise 95dB with

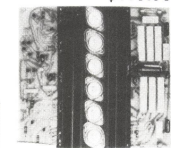
respect 100W • Damping Factor >100 1kHz &

30Hz • Slewing Rate 70V/ussec

Kit includes PCB, heatsink and all components.

Cat. KA-1115

**\$119.50**



## 300W Amp Power Supply Kit

This basically consists of a 300V/A power transformer (PF4363) rectifier and filter capacitors. It also has a 15V AC power supply for the speaker protectors.

Cat. KA-1116

**\$99.50**

## Speaker Protector Kit For 300W Amp

**Ref: EA July 1980**

This device is designed to mate with the Jaycar KA-1115 Playmaster 300W amp module. It also provides the handy facility of switch on mute. This disconnects the speakers for the first few seconds when the amp is switched on, avoiding that horrifying thump in the speakers.

This speaker protector is cheap insurance. The Jaycar kit provides all PCB parts including the relay.

Cat. KA-1117

**\$23.50**

## Verstaile Guitar Preamplifier

NEW FOR  
88

Ref: ETI November 1987

Main features include: a top boost and normal input for guitars, two pre-amp line inputs, bass and treble controls, effects send and return, a sweep eq section, four post eq line inputs and a master level control. No level control is provided for the line inputs as there are inputs would be drum machines and synthesizers. Ideal where there are insufficient amp inputs for all instruments. Bass and treble will provide max cut and boost of frequencies at 100Hz and 8kHz to obtain a wide tonal range. To give a harder edge to sounds, a top boost input is available whereby frequencies above 1kHz are amplified; at around 10kHz there is a massive 20dB of boost! The normal input has a flat response and is excellent for those mellow rhythm chords. A bass cut is built into the input amplifiers. Kit is supplied with PCB and all components. Hardware items - 6.5 kits and transformer are not supplied. Power requirements 12V - 0.12W  
Cat. KE-4729

**\$45.00**

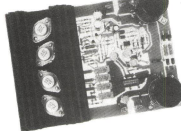


## Subwoofer Amplifier

Ref: EA July 1982

State-of-the-art MOSFET technology combined with a low pass filter. Around 100W rms drive capability. Ideal for use with the Jacyar subwoofer speaker (Cat. CW-2119). Amp will take line level (1V) input or connect direct to speakers. The Jacyar kit includes all PCB parts, heatsink, and power supply filter capacitors.  
Cat. KA-1452

**\$125.00**



## Signal Powered Loudspeaker Protector ETI 494

Ref: ETI October 1982

This unit affords both DC and over-power protection of loudspeakers or systems rated at up to 1500 watts! The unit requires no power supply and has no discernible audible effect on sound quality making it suitable for both Hi Fi and sound reinforcement applications. Two required for stereo. Kit includes PCB and all components including relay.  
Cat. KE-4029

**\$22.50**

## ETI 467 Mixer/ Preamp

Ref: ETI July 1980

Mixes up to 4 inputs (high and low level) with individual level controls. Includes high performance 3 band tone controls making it ideal for musical instrument use. Kit comes without a case so that you can build it with a (usually available from power amp supply, otherwise use Cat. MM-2008 transformer).

SPECIFICATIONS:

**Hum & Noise**

76dB below 50mV input

**Frequency Response**

signal (20kHz bandwith)

**Tone Controls**

30Hz - 30kHz  $\pm$  1dB

**Max Output**

Bass  $\pm$  17dB @ 50Hz

**before Clipping**

Presence  $\pm$  22dB @ 1.5kHz

**Cat. KE-4014**

Treble  $\pm$  22dB @ 10kHz

20V P to P

**\$39.50**



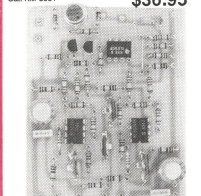
## High Performance Microphone Preamp

NEW FOR  
88

Ref: AEM August 1987

This preamp features DC coupling throughout and achieves a signal to noise ratio of 80dB, common-mode rejection ratio exceeding 80dB well beyond the audio band and provides for phantom powering up to 18 volts. In addition it can be employed in a variety of balanced and unbalanced configurations, balanced in to balanced out, balanced in to single ended out, single ended in to balanced out and single ended in to single ended out. Ideal replacement for balanced microphone transformers often used in professional applications. Short form kit - PCB and components only - no power supply and housing supplied.  
**SPECIFICATIONS TO PROTOTYPE**  
• Voltage Gain: 170 (approx 45dB) • **Slew Rate:** 18V/ $\mu$ s • **Large Signal Bandwidth:** >130kHz • **Frequency Response:**  $\pm$ 0.1dB DC to 120kHz • THD (20kHz bandwidth, balanced mode FLAT measurement) Source Impedance 0 - 200 $\Omega$ ; 200R - 350 $\Omega$ ; 600R • 441mV • S/N Ratio (re 10mV input, 600 ohm source, flat) • **Common-Mode Rejection Ratio (CMRR):** 100kHz = >110dB; 1kHz = >110dB; 10kHz = >100dB; 100kHz = >80dB  
Cat. KM-3061

**\$36.95**



## Super High Power Mosfet Amp Module

Ref: EA October 1985

UP TO 225 WATTS RMS  
INTO 4 OHMS

This mighty circuit designed by the EA engineering team is basically a 'beefed up' version of part of the Playmaster 200. It consists of essentially the same power amp circuitry as the 200 except on a redesigned PCB which also incorporates a speaker protection and turn on relay. Considering the power available, this is very prudent! The Jacyar kit contains all PCB components including the heavy duty relay.  
Cat. KA-1622

**\$99.50**

## AEM 6505 "Workhorse" Amp Module

100 WATTS INTO 4 OHMS/50 WATTS  
INTO 8 OHMS! AND CHEAP!

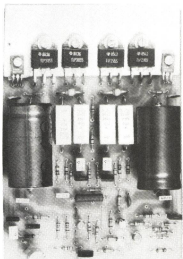
Ref: AEM January 1987

A genuine low cost power amp 'slave' module. Similar in concept to the ever popular ET1480 series but with power supply filter caps on board. This simplifies power supply requirements and keeps costs down. All that is required to make the module operational is  $\pm$ 30V - 40V (DC unfiltered) a signal source and a load! Works well with PA line transformers too. All board parts are supplied including jig drilled heatsink bracket.

**SPECIFICATIONS OF PROTOTYPE**

• **Output Power:** 50W RMS into 8 ohms and 100W RMS into 4 ohms • **Frequency Response:** 15Hz to 35kHz -0.5dB; 10Hz to 50kHz -1dB  
• **Total Equivalent Input Noise:** (20kHz noise bandwidth)  $\leq$  5.5 $\mu$ V • S/N Ratio >100dB • **Total Harmonic Distortion (THD):** <0.05% at 50W; <0.06% at 10W; <0.15% at 1W all at 8 ohms  
• **Protection:** Electronic  
Cat. KM-3050  
Suitable Heatsinks  
Cat. HH-8572 \$5.50 or  
Cat. HH-8541 \$7.50

**\$35.00**



**COUNTRY ORDERS 008 022 888**



## Musicolor IV

Ref: EA August 1981

The Musicolor IV is the ultimate light controller. It is a four channel light unit and with the flick of a switch becomes a four channel light chaser. The chaser features forward/reverse plus an automatic forward/reverse pattern. Four different chaser patterns can be selected via the front panel. The maximum light load is 600 watts per channel or 2400 watts total. Ten 60 watt globes can be used on each channel - 40 in total. Ideal way to brighten up a party room - or for an attention grabber in store window displays - the uses are endless.

Unit has an inbuilt microphone, so the unit can virtually be sat anywhere near a stereo to be used, or can be connected to a speaker. Kit is easy to build, works extremely well and is supplied with everything including case, front panel, 240V output sockets and all components.

- Front panel LED display
- 4 different chaser patterns
- Auto and manual reverse chase
- Sound-triggered chase
- Inbuilt electret microphone
- Safe, opto-isolated circuitry

Cat. KA-1010

**\$125.00**



## 3 Band Shortwave Radio

Ref: EA January 1987

This is a great project for the budding SWL or amateur or anyone. Although there is one IC, you'll have to get down to the nitty gritty of kit constructing.

Winding coils, aligning and tuning. When that is done you can tune into many international broadcasts operating on the shortwave bands. As it stands, this receiver can tune from 0.48MHz to around 17MHz in 3 bands.

Band 1 - 0.48MHz to 1.9MHz

Band 2 - 2.15MHz to 7.7MHz

Band 3 - 6.12MHz to 17.12MHz

The project features high sensitivity and high performance at low, low cost.

Any DC voltage between 11 and 20 volts is suitable.

Kit includes PCB, all components, box and silk screened and punched front panel.

Cat. KA-1681

**\$79.50**



## Vocal Canceller

Ref: EA April 1982

Do you think you can sing? How would you like to be the lead singer in a famous rock group (or any group)?

You can cancel out the lead singer from almost any stereo record and substitute your own voice or musical instrument.

Complete kit includes case.

Cat. KA-1430

**\$24.95**



## Stereo AM Decoder



(Australian Standard)

Ref: EA October 1984

This unit uses the Australian standard Motorola COUAM decoder chip. It will decode the new AM stereo transmissions (with suitable AM tuners). The Jaycar kit is supplied with 1% resistors in lieu of the standard ones, for extra precision.

**\$26.50**

NOTE: This is the ONLY kit that is COUAM ONLY. Other kits are COUAM plus other non-Australian standards. Why pay more for what you don't need!

## WHISTLE FILTER

You will need two whistle filters. You can use the one already in your radio for one channel and we can supply the other.

Cat. LF-1300

**\$23.95**

## Compact Disc Player Attenuator

If you have just purchased a compact disc player your amplifier could be trouble! CD players seem to have been standardised on a 2V output level whereas most Hi-Fi amplifiers have a 500mV sensitivity for full rated output. In order to overcome this you may need a CD attenuator. It does not distort the signal in anyway. It makes an ideal project for beginners but can be useful to the most advanced constructor. The Jaycar kit includes box, switch, front panel, etc.

Cat. KA-1624

**\$9.95**



## AEM 6504 Power-Up 'Status Monitor'

Ref: AEM August 1986

This is basically the ultimate speaker protector. Its prime function is to detect amplifier clipping (indicating overload). It does this very well even to the point of providing 'pulse-stretch' so that your eye can respond to the clipping LED indicator. (Intermittent short duration clipping may not be noticed if the LED is only on for a very short time). The AEM 6504 also has facilities for power on and power off de-thumps as well as DC offset sensor and rail integrity sensor. The Jaycar kit consists of all board components including the massive National brand interrupt relay which has a 55 AMP inrush current rating!

Requires between 12-0-12 and 30-0-30V AC to operate and is rated (conservatively) to 300 watts.

Cat. KM-3045

**\$49.00**

## Sub Carrier Adaptor for FM Tuners

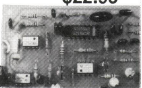
Ref: Silicon Chip Jan '88

This simple adaptor circuit fits in your FM tuner and lets you tap into hidden FM transmissions. Just recently the Dept. of Transport and Communications announced that it is ready to authorise subcarrier transmissions on FM broadcasts. Testing of these transmissions is going on right now, and you can listen to them by building this simple adaptor circuit. The transmissions will be on 67kHz and will have no effect on standard FM mono and stereo radios. Kit requires a 15V - 30V.

Kit includes PCB and all components.

Cat. KC-5014

**\$22.95**



## AM Tuner

Ideal beginners project. This low cost design uses only a single IC and a handful of other components. Simple to build, it gives remarkably good results. Kit includes PCB, metal tuning gang, ferrite rod and all components. Requires 9V 216 battery. Requires an amplifier. Cat. KS-8105 \$16.95 would suffice. Cat. KS-8104

**\$12.95**

## Beginners Bench Amplifier



A very stable and reliable amp designed by David Tibbott. This amp features a LM301 IC preamp and rugged TIP31/32 output devices. It is intended as a 'Bench' amp, i.e. to test out other gear that you have built. It gives a loud output and can also be used as a Hi-Fi amp (not stereo). The only part not to mount on the PCB is the volume control pot, virtually guaranteeing that the amp will work first time. It only needs a 9V battery to run.

Cat. KS-8105

**\$16.95**

## Clipping and Fault Indicator For Audio Amps

Ref: AEM June 1987

An audio amplifier driven into heavy clipping will readily damage loudspeakers, apart from sounding terrible. A DC fault on an amplifier output stage can spell disaster. Add on this simple project to almost any audio amp and it will tell you when the volume is up too far and/or why the speaker protector operated.

Requires 12-30V AC or DC. Kit includes PCB and components.

Cat. KM-3054

**\$19.50**

## Active "Direct Injection" DI Box

Ref: EA October 1987

Our new low cost DI box offers performance and facilities only found on the most expensive units. It converts a high impedance unbalanced input to a low impedance balanced output.

### FEATURES

- Will run on Phantom power
- 9V battery is switched off via input jack, so when microphone is disconnected so is the battery
- Earth lift
- Kit includes die cast box, Scotchlock label, Cannon and 6.5 connectors, switches, PCB and all components.
- Cat. KA-1690

**\$39.95**



**88**

## Sonics/ETI DI Box

Ref: "Sonics"/ETI September 1985

In the Rock 'n' Roll, PA business or home recording game it is highly likely that one day you will need one of these. It is basically a small 'black box' that can transform an unbalanced signal to a balanced one! The applications for this, once you think about it, are endless, Jaycars kit version of this project is not quite the same as the original design. We found after producing about 100 original kits that the pushbutton switchbank was very fragile and it was very difficult to cut out a slot in the die cast box to accommodate pushbuttons. We use rugged and easy to mount toggle switches instead. Apart from that it's kosher!

### SPECIFICATIONS

- S/N Ratio: 100dB (ref 0dBm)
- Distortion: 0.03% @ 4dBm
- Input Impedance: 500K nom (unbalanced) - Output Impedance: 600 ohm nom (balanced)
- Cat. KE-4708

**\$37.95**



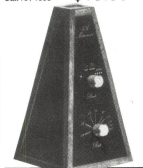
## Metronome with Accented Beat

Ref: EA November 1987

A metronome is a must for people learning music. This classy metronome will provide a steady accented background beat, which is variable from 42 to 208 beats/sec. Features an accented beat every second, third, fourth or all of them can be accented. Kit is supplied in a short form version, so you can build it into whatever you like. PCB, speaker, switches and all components supplied, but no woodwork.

Cat. KA-1693

**\$19.95**



## "Syntom"

A Jaycar Special Project

The Syntom is a very effective drum synthesiser that can produce a variety of fixed and falling pitch effects, triggered either by tapping the unit itself, or by striking an existing drum to which the device is attached.

Four potentiometers give control over different characteristics of the sound. The decay pot governs the time taken for the sound to die away after each strike, from less than 1/10 sec. to several seconds, giving a wide range of envelopes. The frequency of the note is variable over the entire audio range by means of the pitch control, and the sweep control introduces a voltage causing the pitch to fall as the amplitude decreases. These controls, when used in combination with each other enable the most popular drum synthesiser effects heard on commercial recordings to be obtained. Power requirements 9V 216 battery. Kit includes PCB, all components, case and Scotchlock front panel.

Cat. KJ-6502

**\$42.50**



**JAYCAR  
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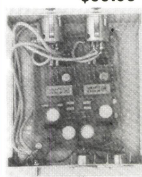
## Audio Balanced Line Driver

Ref: AEM July 1987

This kit is a dual channel (stereo) unbalanced input to balanced line output driver. Ideal for driving an active loudspeaker system where the power amp(s) are in with the speakers. Other applications for the unit include PA systems where line level signals have to be converted over long distances, and bridging a pair of amplifiers. Kit includes, DIN, RCA & Cannon sockets, box, PCB and all parts including the expensive LH0002CHs.

Cat. KM-3060

**\$99.50**



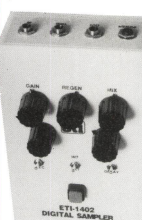
## ETI 1402 Digital Sampler

This simple project enables you to record a sound and play it back. So what? Well the way that it can play back is the trick!

The circuit stores the sound digitally in CMOS RAM. The stored sound can be clocked out of memory at different speeds - so you can change the pitch! As a bonus you can use it for pseudo reverb or as a simple digital delay line. Great for percussion! The Jaycar version of this project comes complete with all board components including CMOS RAM vox - even a 240V power pack.

Cat. KE-4720

**\$119**



## Effects Unit For Musicians featuring BBD (Bucket Brigade Device)

Ref: EA June 1983

Achieve brilliant sonic effects phasing, flanging, reverb and echo. Whether you're a professional musician or an aspiring amateur, this unit will add a whole new dimension to your music.

Three input sockets are featured, each with different input signal levels. These might be used for electret microphone, electronic guitar and line input.

ECHO - Circuit has two categories of echo effect "single" (phaser) and "reverb" (flanger).

SINGLE ECHO - Original signal is presented to the output of the unit together with a delayed version of the signal. Adjustable delay between 1ms and 25ms.

PHASING - Achieved by mixing original signal with an echo of relative short delay.

REVERB - If a certain amount of delayed signal is fed back to the input of the delay stage, it is possible to achieve multiple decaying echos. Some extraordinary and varied sounds can be produced by the adjustable depth control.

FLANGING - With a short echo delay and maximum reverb depth, flanging is achieved. This is a more profound version of phasing and makes the music sound as though it's travelling down a long piece of drainpipe. Kit includes PCB, box, front panel, transformer and all components, even IC sockets.

Cat. KA-1522

**\$115.00**

**Government Instrumentalities, Schools, Public Companies.**

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## Guitar Phaser

A Hobby Electronics Project Most musicians are familiar with the swishing, almost oily effect known as 'phasing'. This phaser is a low noise design drawing very low power. Incorporates rate control and heavy duty bypass foot switch. Unit is turned on when an input is connected and off when it is removed. Complete kit and die cast box supplied. (9V battery required).

Cat. KS-9102

**\$39.95**

*Audio Kits*

**BRISBANE 07 393 0777**

## AEM 4600 Dual Speed Modem

Ref: AEM December 1985

This project enables you to construct a modem that operates at either 300 Baud full duplex or 1200/75 Baud half duplex (i.e. CCITT V.21 Orig; CCITT V.21 Ans; CCITT V.23 mode 2) Orig & CCITT V.23 back) for a fraction of the price of equivalent built units.

The device simply connects to the RS-232 serial port of your PC to enable you to communicate to other PC users. Swap programs - do what you like.

Also talk to Bulletin Boards or Telecomm Viatic service. (Most of Australia's public data communications is V.21 or V.23).

The Jaycar kit uses all the original components and after much field testing has been debugged. It works well.

Cat. KM-3040



**\$169.00**



## Super Simple Modem

Ref: AEM September 1986

We have been asked so many times for this kit, we have decided to include it in our 1986 line-up.

This simple to build modem features operation of the popular communications standard of 300/300 full duplex plus 1200/75 half duplex, providing access to many of the bulletin boards and public dial-up data systems, Viatic and other Videotex systems.

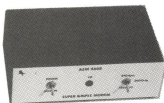
This project is designed around the 7910 world modem chip.

Kit includes box, Scotchcal front panel, line transformer, RS232 socket and all components including the 7910.

The plug-pack is extra - Cat. MP-3020 \$13.95

Cat. KM-3046

**\$85.00**



**NEW FOR 88**

## Modem End-of-File Indicator

Ref: Silicon Chip February 1988

Don't tie up your phone line for longer than you have to. This simple project can be easily fitted to most modems and sounds a buzzer at the end of a file transmission. Cheap and easy to install and is suitable for use in all modems that use the AM7910 world modem chip which means virtually all modems which work at 300 baud duplex. PCB and components supplied.

Cat. KC-5024

**\$9.95**



**NEW FOR 88**

## RS-TRUE-232 Converter

Ref: AEM September 1987

Whilst a great many computer peripherals are designed to interface via an RS232 serial data connection, modems and printers being common examples, some computers have "serial" ports which do not provide signal levels that truly conform to the RS232 signal standard, employing TTL-level signals instead. It might be convenient for the manufacturer and their own add-ons, but not for you when it won't "drive" some equipment you've purchased.

This kit is the "B" general purpose version which accepts a standard 25 pin "D" connector on one end and has pads for flying leads at the other. Will accept standard TTL level signals and convert them to true RS232 levels as well as accepting RS232 levels and converting them to TTL. Kit includes 25D female socket, PCB and components.

Cat. KM-3062

**\$24.95**

## RS-TRUE-232 Converter for Commodore

Ref: AEM Sept 1987

As above kit, but suited for Commodore. "A" version. Replaces old version because this one derives its power from the computer.

Kit includes PCB, all components and the 25D female and Commodore edge connector.

Cat. KM-3065

**\$27.95**

## ETI 1601 RS-232 Interface for Commodore C-64 & VIC20

Ref: ETI July 1986

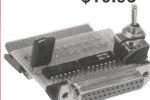
This kit enables you to connect RS-232 to either your C-64 or VIC 20.

Edge Connector to suit Commodore

Cat. PA-0888 \$6.95

Cat. KE-4722

**\$16.95**



## ETI 675 RS-232 to Centronics Adaptor

Ref: ETI January 1984

This small project enables you to interface a printer to the RS-232 serial port on your computer. The kit consists of PCB and parts (including a special right angle Canon DB25 plug) but not the Centronics plug or DIP switches, which are optional anyway.

Cat. KE-4666

**\$32.50**

## Computer Controlled Electronic Strobe

Ref: EA August 1987

The cheapest electronic stroboscope coasts over \$300 and even a project version adds up to \$100. By converting an old electronic flash from a camera and triggering it by computer an accurate strobe can be built for a fraction of the price. Ideal for High School physics courses, to analyse standing waves on strings and wave motion on ripple tanks.

Kit includes PCB, case and electronics, but not the computer plug or flashgun.

Cat. KA-1688

**\$13.95**

## Low Cost Speech Synthesiser for your Computer- AEM 4504

Ref: AEM February 1986

This low cost project uses the SPQ256A AL2 allophone speech processor IC. It will work with a Commodore C-64, VIC20, Microbee or any computer having an 8-bit I/O port. The speech pitch can be adjusted giving ranges from about Kamahli to Joan Sutherland.

The kit includes PCB, speaker, 16 pin IDC DIP header, IC sockets and all board components.

Cat. KM-3042

**\$43.50**





## Listening Post

### Ref: AEM July 1985

Our most popular AEM kit so far! This device attaches between the audio output of a shortwave receiver and the input port of a computer. It allows decoding and printing out of morse code, radioteletype (RTTY) and radio facsimile (FAX) pictures. Now you can 'avedrop' on all those weird signals you find littering the shortwave bands. Get into the international news services print your own weather maps, listen-in on ship-to-shore radio. The Jaycar kit consists of all essential parts to construct the project including Scotchloc front panel and software program for the MicroBee or C-64. Cat. KM-3015

**\$39.95**



## Radio Teletype Modulator

### Ref: AEM May 1987

Ideal companion to the very popular 'Listening Post' kit (see above). This simple, versatile unit is intended for attachment to a personal computer using software to generate the radio teletype (RTTY) Baudot code characters. The unit is not computer specific, although the method of connection to any given computer will generally be determined by the software in use. Virtually any machine with a TTL level I/O port can be used successfully. PC board and all components supplied. Cat. KM-3016

**\$32.50**

**JAYCAR  
No.1  
FOR  
KITS**

## Packet Radio for Commodore 64

### Ref: AEM July 1987

Packet radio has become the fastest growing mode in amateur radio since the introduction of two metre FM. If you are intrigued by this mode but have been put off by the cost and difficulty of obtaining a TNC, then this project is for you. This system will allow you to get going on packet with minimum outlay because the only hardware needed is for the modern and some switching. Jaycar's kit is thoroughly recommended by the Packet Radio Society of Australia. Kit includes PCB, box, Commodore edge connector, DIN plug & socket and 25D plug and socket. Cat. KM-3058

**\$59.95**

## "Uo" Satellite Decoder

### Ref: AEM October 1987

The University of Surrey (UK) maintains two satellites - Uo-9 and Uo-11. Information transmitted is of an educational, amateur radio or technical nature concerning the satellites themselves. Very interesting! You can pick up the Narrow Band FM (NBFM) signals from the satellites as they pass over with a simple antenna (at 145MHz), and say, a scanner or 2m receiver.

Audio FSK signals from the receiver are processed by project 3506 and presented to your computer as 'RS232'. A simple 'Dumb Terminal' program will allow your computer to decode the signals and reproduce the text transmitted by the University on your monitor (or printer). Jaycar kit includes all specified components including 250 female sockets, RCA plug & socket, box, MAX231, etc. Cat. KM-3063

**\$55.00**



## Telephone Intercom Power Unit ETI 291

### Ref: ETI February 1988

If you have two of the old Telecom rotary dial telephones, don't throw them away. For less than \$60 you can have a practical home intercom system. Just connect two phones to the output of the ETI-291, spin the dial on one phone to tinkle the bell on the other and talk. No modifications are needed on the telephone and the unit will operate telephones separated by up to a few kilometres. Perfect for houses, shops, factories or wherever a high quality intercom is required. Kit includes PCB, two transformers, two telephone sockets, box and all components. Two core speaker cable is all that is required - Cat. WB-1702 25c per metre \$19 per 100 metre reel. Cat. KE-4731

**\$59.95**



## Off Hook Indicator for Telephones

### Ref: Silicon Chip Nov '87

How many times have you been on the phone when someone else in your household has picked up another extension and begun dialling?

Another common problem in a multi-phone household is that possibly you've answered one incoming call on one phone, then moved to another phone to carry on the conversation, leaving the first phone off the hook. Hours later, you discover that the phone is still off the hook and you wonder how many calls you've missed. This circuit avoids those hassles. You can build one into each phone so that a LED will then flash, on every extension, to indicate whenever the line is in use. The unit is very easy to install and it should be possible to fit it into even the most compact pushbutton phone. You simply connect it across the incoming line to the handset. No batteries or power circuits are required. PC board and components only. Cat. KC-5011

**\$12.95**

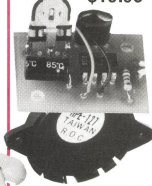


## Telephone Ringer

### Ref: Silicon Chip Jan '88

Are you tired of the sound of your telephone bells? You can change to a modern sounding chime by building this simple module. If you work in a large office with many phones you can set the tone of your phone so it is distinctly different to all the others. Personalise your phone! Small enough to be installed in just about any phone. Kit includes PCB and all parts. Powered through the phone. Cat. KC-5015

**\$19.95**



## ETI 283 Custom Telephone Ringer

### Ref: ETI April 1987

Connect this to your office or home phone (with double adaptor) and generate your own space age telephone ring tone! Can be adjusted to give very 'spacey' arcade game like noises! If you work in an environment where you cannot tell if it's your phone that is ringing, this is for you.

Case and all electronics included. Double adaptor Cat. YT-6020 \$7.50 extra.

Cat. KE-4728

**\$29.95**



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**SPRINGVALE-VIC 03 547 1022**

## 30 Volt - 1 Amp Benchtop Power Supply



This design features a modern moulded plastic bench top type case, variable output from 3 - 30 volts and variable current limiting over 2 ranges. Overload protection and switchable voltage/current metering is also provided. Kit is complete with PCB, box, punched and screened front panel, Scotchcal meter scale, heatsink, meter and all components.

### FEATURES AND SPECIFICATIONS

- Short circuit protection
- 3 - 30 volts output
- 0 - 1 amp output current (variable current limit)
- Load switching
- 0.2% load regulation
- 2mV rms ripple

Cat. KA-1574

**\$89.50**



## Dual Tracking Power Supply

NEW KIT

Ref: Silicon Chip January 1988

Another power supply kit?

This one gives from  $\pm 1.2V$  to  $\pm 18.5V$  at  $1.7A$  between  $\pm 3V$  and  $\pm 10V$ . Above  $10V$  the available current reduces to 200 milliamps at  $\pm 18V$ . It's the baby brother to our KA-1682 (see below) and \$30 cheaper for those who don't require 22 volts.

This supply has voltage metering, a LED dropout indicator and short circuit protection.

The Jaycar kit includes PCB, all components, box, meter, screened and punched front panel.

Cat. KC-5022

**\$99.95**



## Dual Tracking Power Supply

Ref: EA February 1987

Based on readily available components, this power supply can provide voltages from 0 to  $\pm 21.5V$  at currents up to 2 amps. It also features overload protection, a fused  $+5V$  1 amp output, and output voltage metering.

Kit is complete with quality punched and screened metal front panel, Scotchcal meter panel, heatsink, meter and all components.

A high class power supply.

### SPECIFICATIONS

- Housed in tough "ABS" instrument case
- Fully protected against short circuits, overloads and thermal runaway
- Employs fold back current protection
- LED indicator for regular dropout
- Voltage adjustable to within 10mV
- Output  $\pm 1.3V$  to  $\pm 22V$  @ 2 amps -5V @ 1 amp
- Load switch

Cat. KA-1682

**\$129.95**



## Universal Speed Control

NEW KIT

Ref: Silicon Chip December 1987

KIT 1

This multipurpose circuit can be used as a speed control for electric drills or fans, as a power controller for electric blankets or soldering irons, or as a table lamp dimmer.

The electronics are PARTIALLY assembled on a PC board. Just connect the mains plug and socket and mount it in a jiffy box and it's finished. Should take you about an hour. As an added bonus, it incorporates components for suppression of electromagnetic interference. Complete kit includes pre-assembled PC board, box and front panel, mains cable and plug and socket.

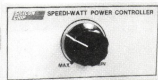
### CONTROLS

- Electric drills
- Fans
- Electric blankets
- Lamp dimmer
- Soldering irons

Cat. KC-5016

**ALL FOR**

**\$18.95**



KIT 2 - UNIVERSAL SPEED/LIGHT/HEAT CONTROLLER

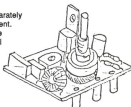
### Short Form Version

As used in the above kit. It is available separately if you wish to mount it in a piece of equipment.

PCB measures  $45 \times 60mm$  with most of the components professionally soldered in. Will control up to 3 AMPS (i.e. 750VA). A small heatsink may be required on the TRIAC over 2 amps. Includes assembly/connection instructions.

Cat. KU-6522

**\$9.95**



## ETI 581 $\pm 15V$ 150mA Power Supply

A classic design. Many, many hundreds of these units have been sold since their inception in 1976. Probably the most simple  $\pm 15V$  low current supply around. Ideal for GP amp projects, computer projects or any project requiring  $\pm 15V$  from 240V. Kit includes 240V PCB mount transformer, PCB, and all board components. Does not include mains cord, fuse, etc. Designed to fit into a small space.

Cat. KE-4405

**\$27.50**

## Car Stereo in your Home

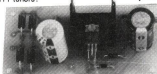
Ref: Silicon Chip November 1987

Adapt a surplus car radiocassette player for use in your home. Decent table type radios are expensive. Converting a car radio to run off the mains is quick and easy and inexpensive. This kit is a power supply to do just that. Kit includes transformer, PC board and all components. You can build it into a mantle type radio very simply using instructions supplied, so dig that radio out of the bottom of the wardrobe. Suggested speakers are Cat. AS-3014  $6 \times 4"$  \$10.95 each. Woodwork not included. Did you know that many car radios have far better RF sections than alleged "Hi Fi" tuners?

Cat. KC-5012

**\$28.95**

NEW KIT



## Experimenters Power Supply

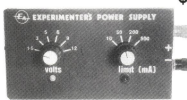
Ref: EA September 1987

This easy to build power supply is ideal for the experimenter on a limited budget. It features switch adjustable output voltage and current limiting. Switchable voltages are 1.5, 3, 5, 6, 9 and 12 and current limit is 10, 50, 200 and 500mA.

Kit includes PCB, box, and all components except AC power pack.

Cat. KA-1689

**\$26.95**



NEW KIT

## 12-230 Volt Inverter

Ref: EA September 1985

This compact design features a toroidal transformer, automatic self starting, current limiting and thermal overload protection.

The applications of an inverter are many and varied.

- On the farm for electric drills, soldering irons, welding, etc., where mains is not available
- Building sites for drills, sanders, saws, etc., where a long extension cord is dangerous
- Remote outback for powering audio and video equipment, lights and power tools.

**FEATURES:** • Small toroidal transformer - unit can be carried in one hand. Previous inverters were huge. • LED indicators on front panel which indicate if voltage is regulated, if circuit shuts down due to thermal overload, if excessive current is drawn, in which the inverter automatically reduces its output voltage to limit output current. • Unit consumes virtually no power until an appliance is switched on, the circuit then starts automatically.

This is an excellent kit, which works extremely well and is straight forward in its assembly. We have sold thousands. Kit includes punched and screened front panel, double mains point, toroidal transformers, everything to complete the kit.

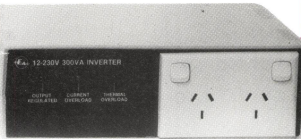
### SPECIFICATIONS:

- Nominal supply voltage: 12V DC • Frequency: 50Hz crystal locked • Maximum Load: 300VA • Current Limiting: 30A (primary) • Standby Current: 580uA.

LOAD (W)	OUTPUT VOLTAGE (RMS)	INPUT CURRENT (A)	BATTERY LIFE (Minutes)
40	240	4.6	240
100	250	11.9	80
200	240	21.7	50
300	230	30.3	28

Cat. KA-1610

**\$269.00**



## Soldering Iron Temperature Controller

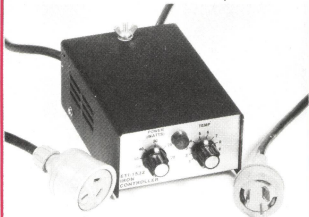
Ref: ETI September 1986

If you have put off buying a temperature controlled soldering iron because they are so expensive, your problems are solved with this low cost soldering iron temperature controller. While this kit may not have all the features of a soldering station, it provides fully regulated, adjustable temperature control over a reasonably wide temperature range. And there is no need to discard the soldering iron that you have now. It will work with just about any conventional 240V iron rated from 20 watts to 75 watts and can easily be adapted for use with higher powered soldering irons.

Complete kit with PCB, all components, case, panel and mains plug and socket.

Cat. KE-4725

**\$39.50**



## 40 Watt 12/230V Inverter

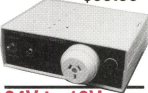
Ref: EA August 1985

This improved design enables you to run small 240V appliances from a 12V car battery with modest current drain. When not in use it can also be used as a battery charger! As the 50Hz mains frequency is crystal generated the inverter is ideal for living synchronous motor turntables with great speed accuracy.

The Jaycar kit is complete and original to the project article as is usual with our kits. An attractive silkscreen and drilled front panel provided.

Cat. KA-1588

**\$99.95**



## 24V to 12V Converter for Trucks

Ref: Silicon Chip Dec '87

This 24V to 12V converter can deliver up to 5 amps with very little power loss.

It is intended for powering CB radios and radio/cassette players in trucks which normally have 24 volt battery supplies. Its far better in the long run than tapping off the battery banks as this has long term drawbacks on battery life.

Kit is complete with all components and metal box.

Cat. KC-5017

**\$59.00**



## Kit Constructors Manual

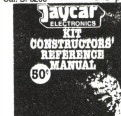
A must for amateur constructors.

Contains much useful information for the more experienced. Huge amounts of information on construction and identification of parts.

8 pages.

Cat. BI-8200

**50c**



## NiCad Float Charger



Ref: ETI March 1983

This NiCad battery charger provides a happy medium between fast chargers and constant current chargers. It will bring a set of cells up to full charge from complete discharge in about 12 hours and then automatically drop to a trickle whenever the charging is done. This means full recovery in half a day with safety from overcharging damage.

Designed to charge 4 x AA batteries in series, but you can charge different numbers of cells of amp-hour capacities between 250mAh and 1Ah simply by selecting the values of three resistors according to a table supplied with the kit.

The project can be incorporated inside a piece of equipment or it can be built into a dedicated charger at very little cost and will run off any power supply of 10 to 22 volts.

Kit includes PCB and components only - no hardware.

Cat. KE-4029

**\$14.95**

## Solar Generator

Ref: ETI December 1987

With advances in solar cell technology, falls in price and higher efficiency, solar cells have finally begun to be practical sources of power. This is a cheap, no fuss way to trickle charge a 12V lead acid car battery in any area where mains power is unavailable. Ideal for remote data acquisition stations, caravans and boats. The type of solar panel required is not very critical. Almost any unit will do the job. Typically no more power than 6 watts is required with an output voltage of 12 to 20 volts.

Kit includes PCB, and all components excluding cell and epoxy.

Cat. KE-4730

**\$12.95**

DOES NOT INCLUDE SOLAR CELL



**88**



## Etching Kit

Make your own printed circuit boards. This kit contains a bag of Ferric Chloride, a piece of copper clad board and a dolo etching pen. Full instructions are supplied to help you get started making your own PCB's.

Cat. KJ-7900

**\$9.95**

**COUNTRY ORDERS 008 022 888**

*Inverter Kits*

## 8 Sector Burglar Alarm

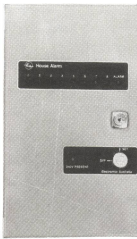
Ref: EA Jan/Feb 1985

This unit costs far less than equivalent commercial alarms. In fact we don't know of an 8 sector commercial unit under \$400. The box has been purposely made by Jaycar and is screened and punched as the inside panel is too. We no longer use the cheaper petty cash box.

The alarm has 8 separate sectors and each can be monitored independently. Each sector is provided with an indicator LED and an on/off switch. The multi sector approach has the advantage that if one sector is triggered and the alarm cycle has run its course, the rest of the house is still protected by the other active sectors. The sector disable switches are a great idea. These enable the user to isolate one or more sectors as required. In this way some areas of the house can be used, while others remain protected; e.g. internal PIRs can be disabled while perimeter sectors remain active, or in a two story house when the family retire for the night the bottom floor can be fully alarmed. Each sector is identical and will accept both N/O and N/C sensors and has end of line resistors, so if a wire is cut, alarm will sound. Two of the inputs have delays.

The alarm has a warning buzzer which warns that the alarm is about to sound. You can adjust this from 5 to 55 seconds. Ideal if you forget to switch the alarm off upon entry. When triggered, the alarm drives a horn speaker for between one and 15 minutes, and also trips a relay which can turn on a bell or TV camera, etc. Alternatively, you can have a silent alarm in which the relay can activate a dialler. It has a back-up battery facility (battery not supplied) with a charger circuit. Kit is supplied with mains transformer so you don't need to buy an expensive power supply. Kit is supplied with PCB, all components, switches, power lead, 4 alarm stickers, horn speaker and case. Options are Gel Battery 1.2Ah Cat. SB-2480 \$22.50. Beware of other kit suppliers that don't supply all of the above.

Cat. KA-1582 **\$169.00**



## 4 Sector House Alarm

Ref: ETI May 1985

This clever design incorporates all the features required in an alarm at a truly low price.

- 4 sectors (2 with delay, 2 without)
- N/O and N/C sensors can be connected to the same sector
- Loaded sectors, so if a wire is cut, alarm will trigger
- Adjustable alarm time
- Will automatically re-arm after going off
- Seven LEDs supplied to indicate:
  - power is on
  - at turn on 4 LEDs indicate if each sector is sealed
  - after short time any unsealed sectors are locked out and LEDs are extinguished
  - if triggered LEDs will indicate which sector
- On board siren driver for horn speaker
- DC 12V lamp output for bell

This is a feature packed alarm. Kit includes PCB, and all components. Cat. KE-4698

**\$29.95**

## Electronic Rain Gauge

new for 88

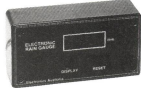
Ref: EA March 1987

Have you always wanted a rain gauge but could never be bothered going out to empty it? Our electronic rain gauge kit automatically empties itself, has a remote display which can be indoors and measures up to 999mm of rainfall with 1mm resolution.

Our kit is a short form kit with electronics supplied, but no mechanical parts which are cheap and readily available.

Kit includes PCB, front panel, box, perspex, reed and magnet, switches and other components. Cat. KA-1687

**\$49.95**



## Microwave Leak Detector

Ref: ETI 724

If you own a microwave oven, your peace of mind is worth the price of this kit. Extremely simple and foolproof to build and use. Gives a positive indication of the security of your oven's seal. Complete kit with box, front panel, meter, PCB's and all components. No battery required.

Cat. KE-4013 **\$17.95**



## Electric Fences

### "ELECTRIC FENCE"

Ref: EA September 1982

Mains or battery operated powered, this electric fence controller is both inexpensive and versatile. It should provide an adequate deterrent to all manner of livestock. Additionally, its operation conforms to relevant clauses of Australian Standard 3129. Kit does not include automotive ignition coil which is required. Cat. KA-1109



**\$23.50**



## ELECTRIC FENCE CONTROLLER

### NEEDS NO AUTO COIL!

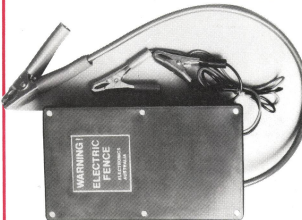
Ref: EA December 1985

This electric fence controller is a considerable development over older designs (which is still currently available).

Because this new circuit uses a special output transformer it is far more likely to work well into false loads such as tall grass or dirty insulators. The new circuit has also less current drain but far higher overall performance.

The Jaycar kit is supplied with a slightly different box than shown in the illustration. Also included is a length of HT cable and heavy HT connecting clip. Cat. KA-1660

**\$59.50**



## HIGH POWER ELECTRIC FENCE

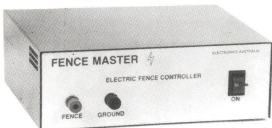
Ref: EA October 1986

For very long fence runs, say 1km or more the KA-1109 and KA-1660 are inadequate. This kit has a much lower output impedance so it can drive long fence runs and can drive more punch, 5kV to be exact.

Low output voltage impedance stops the output voltage from dropping due to loading effects caused by wet grass and dirty insulators. Unit is 12 volt powered and conforms to rigorous requirements laid down by the SAA.

Kit includes cabinet, Plessey 30uF capacitor, special transformer and all parts. Cat. KA-1678

**\$229.00**





## Protector Car Alarm

Refer: Silicon Chip Feb 1988

This refined car burglar alarm has just about every feature you could want, and is easy to build. Included are a number of features which, to our knowledge, are not included in commercial alarms but which are very effective theft deterrents.

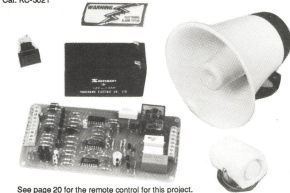
### MAJOR FEATURES:

- Delayed input to monitor all doors
- No delayed (instant) input to monitor boot and bonnet
- Automatic cut out and reset after alarm has been triggered. Siren sounds for 90 seconds and stops, but is adjustable.
- Ignition killer. As soon as alarm is triggered ignition is disabled.
- Separate siren alarm. Instead of using the car's horn, which can be easily disengaged, alarm has provision for a separate siren which can be mounted in an inaccessible place under the bonnet. (Siren still supplied).
- Separate internal alarm. An unbelievably loud piezo screamer (116dB) is mounted inside the vehicle making it unbearable for the thief inside the car. (not supplied).
- Back-up battery. Facility for a back-up battery if main battery is disconnected. (not supplied with kit).
- Battery sense. Alarm monitors the input from the main battery at all times, and if this is disconnected the alarm will sound.
- Ignition sense. Any attempt to start the vehicle (supposing that the thief has entered by opening a door, letting the alarm time out, and then coming back to have another go) will trip the alarm and immobilise the vehicle.
- Dashboard flasher. A rectangular red push button switch/light is supplied. Alarm is turned off by a hidden switch only.
- Kit includes - PC board, box, Scotchcal panel, 2 relays, flasher switch/light, bonnet switch, 2 alarm stickers and all components.

Extras required are:

- Inside 116dB piezo screamer Cat. LA-5255 \$17.95
- Outside siren and driver Cat. LA-5700 \$26.50
- Back-up Battery Cat. SB-2480 \$22.50
- Cat. KC-5021

**\$79.50**



See page 20 for the remote control for this project.

## "Screacher" Car Alarm

**THOUSANDS SOLD**

### SCARE THE PANTS OFF WOULD BE THIEVES!

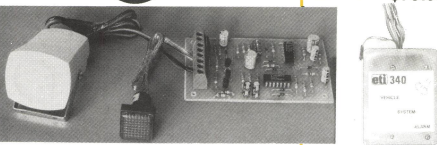
This car alarm is fitted under the dash of the car and is designed with a new deterrent strategy. When a thief breaks in (after entry delay) an unbelievably loud shrill sound goes off - INSIDE THE CAR making it too unbearable to proceed with stealing the car. The thief will be scared witless by the deafening noise of a demented 116dB monster canary.

The alarm has a dash lamp flasher, exit and entry delays, a three-second soft alarm to remind you to turn it off, and automatic resetting. Two inputs are provided. Both respond to a change in state, whether from high to low or vice versa. To keep installation really simple, the circuit just uses a basic on/off switch which is hidden. The Jaycar kit includes the direct import 116dB screacher, dash lamp, PCB and all components.

Cat. KA-1675



**\$34.95**



## Deluxe Car Burglar Alarm

Ref: EA May 1984

This unit provides a very comprehensive array of facilities viz:

- Two delayed inputs, six instant
  - 10 second delayed exit, 10 second delayed entry
  - Provision for auxiliary battery
  - Alarm trips for 2 minutes with automatic re-arming at end of alarm time
  - Alarm output: 1kHz tone modulated at 100kHz and 1kHz driving an 8 ohm speaker (i.e. no separate siren driver required).
  - Only 13mA current consumption, 500mA when alarm is triggered
  - Flashing dash panel lamp, operated on/off switch, provision for two-way protection
- The Jaycar kit includes all board components, specified case and Scotchcal front panel. Inc. siren, Cat. KA-1550

**\$89.50**



## ETI 340 Deluxe Car Alarm

Ref ETI April 1984

This magnificent Jonathan Scott design will protect your valuable vehicle from virtually ANY sort of interference - from hub cap stealing to being towed away! It does not rely on voltage or current sensing to trip the alarm, but "Resonance Microphones". It can also protect "perimeter" accessories such as driving lamps and roof racks. The project (and our kit) meets the major requirements of car alarms set down by the well respected National Roads & Motorists Association (NRMA of NSW).

The project features the following:

- 3 delays: entry, exit and alarm sounding time before resetting (all adjustable)
- Perimeter alarm trips immediately if the thief tries stealing mags, tyres, fog lights, etc.
- Same alarm if thief tries to disconnect battery of car
- You can arm the unit in a car park (for example) and still leave the keys with a third party (i.e. parking attendant)
- Engine condition warning buzzer facility

The Jaycar kit features:

- 2 resonance microphones in the basic kit. (Extra resonance mics are available) Cat. AM-4000 \$8.50 ea.
- Original die cast box
- 2 BONUS self-addressed burglar alarm stickers.

Cat. KE-4678

**\$79.50**

## Ultrasonic Movement Detector

Ref: EA August 1984

Designed to be used with the EA deluxe car alarm kit (KA-1550). Will provide added protection against illegal entry and will trigger the alarm if a window is broken or if there is any movement inside the vehicle. It can also be used with some commercial alarms.

Kit is supplied with PC board, case and all components including the transmitter and receiver. Cat. KA-1556

**\$34.95**



**88**



## Deluxe Red Light Flasher

This kit is simply the easily-identifiable pushbutton square dash mounted switch with a flasher circuit on the back! Very sneaky! You get the deference of a flashing red light (the original light switch as used on the real alarms) but without the cost of installation hassle of a full alarm. Kit includes 2 BONUS car alarm window stickers.

Cat. KJ-7000

**\$19.95**

**SAVE**

**\$8.50**



## Dashboard Car Alarm Lamp Flasher

This is the alarm you fit when you don't fit an alarm. It simply operates a flashing light on your car's dashboard, which, hopefully will discourage car theft.

The Jaycar kit includes two window deterrent stickers to further give the impression that a real alarm is fitted. Cat. KA-1630

**\$12.95**





## Eight Channel Infra Red Remote Control

new for

Ref: EA June/July 1987

This multifunction IR remote control unit can control up to 8 channels or functions - DC or 240V AC. Suitable as a remote control for your TV set, CD player, VCR, cassette player or even a model railway. It will operate any device which is normally controlled with momentary or change over contacts. It also has an option for power on/off, mute and up/down volume control.

A very versatile kit indeed.

KA-1685 Receiver includes box, PCB, transformer and all components. KA-1684 Transmitter includes PCB, box, Scotchcal panel, switches and all parts.

KA-1686 Add-on includes 4 relays and all components for on/off, up/down option. Extra relays Cat. SY-4061 \$4.75 each.

IR Receiver

Cat. KA-1685

**\$127.95**

IR Transmitter

Cat. KA-1684

**\$45.00**

On/off/Up/down  
Option

Cat. KA-1686

**\$55.00**



## Universal Voice Operated Relay

new for

Ref: EA November 1987

Are you an amateur or CB radio operator who is sick of having to push a button on your microphone every time you want to transmit?

Well, this simple device will take the drudgery out of talking for less than the cost of a new desk top microphone! This easy to build VOX incorporates anti-vox circuitry and features adjustable gain on the microphone and speaker inputs. The delay period before the relay drops out is also adjustable to allow for varying gaps between words and syllables. It can also operate from a wide range of supply voltages, allowing the unit to be powered from the rig to which it is connected if convenient. A switch is incorporated for disabling the VOX to return to manual. Short form kit includes PCB, switch and all components, but not box, plugs or sockets.

Cat. KA-1692

**\$24.95**



## Simple Timer

This project will alert you that a predetermined amount of time has elapsed. It uses 2 IC's and is easy to build and safe as it runs off a 9V battery.

To keep the cost down a speaker is not supplied, though everything else is. Any speaker will do.

Cat. KS-8129

**\$11.95**

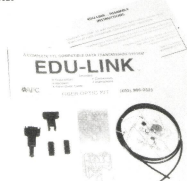
## Fibre Optic Evaluation Kit

**DIRECT IMPORT - YOU SAVE!!**

The EDU-LINK kit is a fibre optic evaluation system consisting of TTL compatible transmitter board, IR LED, one metre of fibre optic cable, photodiode and TTL compatible receiver board. The fibre optic connectors are also included. Complete step-by-step instructions are included as well as theory of operation and tutorial notes. An ideal learning aid for engineers, students and electronic hobbyists alike.

Cat. KJ-6520

**\$49.95**



## Low Cost Utility Timer

new for

Ref: EA February 1988

Whether you wish your egg soft, but not too soft, or whether you want to add the time factor to a game or trivial pursuit, this utility timer is ideal. With it you can see and hear the time ticking away!

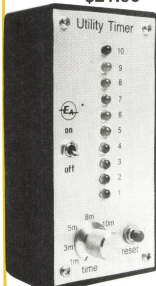
The timer can be set for the total period ranging from 10 seconds to 15 minutes. This range can be changed, if required, by changing the values of certain components.

The timer has 10 LEDs on the front, which visually shows how much time is left. As each LED is lit, a beep is heard also. If a trivial pursuit question is answered promptly for example, there is a reset button, so the next played can start being timed promptly.

A great kit with many uses. Kit includes box, panel, PCB and all components. A 216 9V type battery is required.

Cat. KA-1697

**\$21.95**



## Simple 3 Digit (0-999) Counter with LED 7 Segment Display

This kit is great for scoreboards or any counting application. It will count to 999 events and then reset to zero. It can be ganged to count to high numbers. Two kits connected together will count to 999,999 for example.

A low voltage pulse between 7 - 14 volts will increment the counter by one digit. A simple counting circuit is included with the assembly instructions. 9V battery required (not supplied). All board components supplied.

Cat. KS-8114

**\$23.95**

## Digital Photo Timer

new for

Ref: EA August 1986

Our digital photo timer kit includes a three digit LED readout with individual setting pushbuttons for each digit. A start/stop pushbutton and hold and focus toggle switches control the timer operation. Times from 1 second up to 9 minutes and 59 seconds can be set which is more than adequate for photographic usage. It also displays the time remaining before the end of the timing period. A three pin mains socket is on the rear panel for a photographic exposure lamp.

Kit is supplied complete with case, front panel and all parts.

Cat. KA-1674

**\$89.95**



## Door Minder

Ref: Silicon Chip Feb '88

This project will sense a door opening in a large or small room and will sound a two-tone chime. The most obvious application of this project would be a door monitor for shops, it could also be used in offices, and even as a sensor in a burglar alarm. The Door Minder can be placed anywhere in the room, even an adjoining room, and windows can be opened, provided they are not really large.

The Minder can be used on either side of the door because it senses a momentary drop in pressure, and works equally well with inward and outward opening doors. This is an excellent concept and it works very well.

Kit includes PCB, box, speaker, mic insert and all components. All you require extra is a power pack to run off 240V Cat. MP-3007 \$14.95.

Cat. KC-5020

**\$37.50**



new for

**JAYCAR**

**No.1  
FOR  
KITS**

**BRISBANE 07 393 0777**

## VHF Receiver for Weather Satellites

NEW FOR 88

Ref: AEM February 1988

Many enthusiasts and educators wish to receive weather satellite pictures. Rather than tying up an expensive piece of equipment such as a scanner, this is a self-contained receiver designed for the job. Kit design incorporates a simple signal conversion superheterodyne receiver with 4 crystal controlled channels which can be operated from 12 volts. Relatively easy to assemble, but some access to test equipment will be required. Kit includes PCB, prewound inductors and all components. Crystals and connectors are not supplied. Cat. KM-3066

**\$99.00**

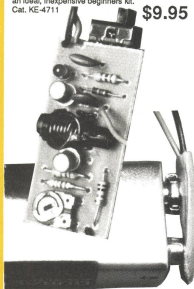
## Miniature FM Transmitter

Ref: ETI December 1985

Over the years Jaycar has had heaps of low cost FM transmitters. They all suffer from severe problems of drift, low output and frequency change due to hand capacitance.

This unit is a two transistor two stage transmitter that has the benefits of being VERY COMPACT. The Jaycar kit contains all specified parts and makes an ideal, inexpensive beginners kit. Cat. KE-4711

**\$9.95**



Watch our monthly ads for all the latest kit releases throughout the year. Over the past 12 months we have released over 45 new kits.

## Telephone Line Grabber

Ref: Silicon Chip March 1988

No need to put up with interruption from extension phones. When you pick up the phone, this simple circuit cuts the extension dead. Stopping them from listening in or dialling out.

Supplied with PCB, all components, case and Scotchcal front panel. (One unit is required for every phone). Cat. KG-5025

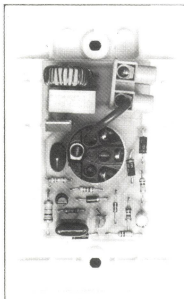
**\$21.99**

## Incandescent Lamp Saver

This kit when fitted will greatly extend the life of those expensive downlights and spotlights. Not only that they are *incandescent*!

By "soft starting" the filament providing over voltage protection and lamp derating the life of that bulb will improve out of sight. This circuit does all three. The Jaycar kit includes PCB and all board components and is designed to mount behind the wall switch plate. At \$16 it should pay for itself well within 2 years! 300 watt rated. Cat. KA-1670

**\$15.99**



## Touch Lamp Dimmer

The latest in Hi Tech light switches! Put these in your home and your friends will be amazed.

The touch dimmer replaces your standard size light switch, and all you see is a silver panel the full size of the plate.

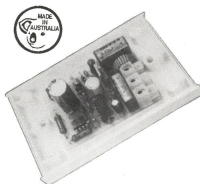
To switch the light on and off all you need do is touch the plate anywhere. To dim the light just hold your finger on the plate, the light will stay at whatever brightness it was when you remove your finger.

Uses a high tech Siemens IC. The Jaycar kit contains all the necessary components including the small contact spring and HiFi wall plate.

Watch out for kits that don't supply all the necessary parts.

Cat. KA-1508

**\$29.95**



## Video Fader For Home Movie Buffs

Ref: EA January 1986

Add a touch of professionalism to your video movies with this simple video fader circuit. It enables you to fade a scene to black - and back again without loss of sync or colour. Will also allow you to fade smoothly from one scene to another as well as simulating night time scenes. Short form kit with PCB and components supplied only.

Requires 12V AC Cat. MP-3010 \$13.95 Cat. KA-1626

**\$24.95**



## JAYCAR No.1 FOR KITS

## UHF Remote Switch for your Car Burglar Alarm

Ref: Silicon Chip

Build this circuit and you can turn your car's burglar alarm on and off by pressing the button on a small keying transmitter.

Main Features:

- UHF transmitter and receiver on 304MHz
- Two versions of the handheld transmitter
- Transmitter uses a single IC and one transistor
- Single button to activate and disable alarm
- 40 metre transmitter range
- Trinary digital coding with 13,122 codes for security
- Multi-optional receiver (build it as you want it) includes box for transmitter but without button. Also included is receiving board and main chip (MCI45028), other parts are not supplied due to the many options available to the constructor.

Cat. KC-5026

**\$33.95**



## 50 & 100W Mosfet Amplifier 'Brick'

### NOT A KIT - INSTANT POWER!

At last, a good value AUSTRALIAN MADE amplifier module that is rugged, has the heatsink built in and is cheap!

The 'Jaybrik' as they are called are basically rugged Mosfet power amplifiers manufactured to high standards on fibreglass board with a special DIECAST heatsink. All board components are enclosed in a special conformed coating that ensures that the amp will operate in extreme environmental conditions. If in the unlikely event of a repair being necessary the coating can be picked away and the offending component replaced. The Jaybrik will drive either 4, 8 ohms or 100V line step-up transformers and has unconditional stability. They are virtually bullet proof. They are ideal for professionals who need slave P.A. in a hurry or any Hi Fi or sound reinforcement application. You simply connect filtered DC and a signal to them and they are guaranteed to go!

So check out the specs. You will find them stunning for a PROFESSIONAL amplifier module.

# JAYBRIK

#### SPECS:

**J-100** 100W RMS min into 8Ω, with 45-0-45 3A transformer and 1 x 8000F/75V filter cap each rail and 6A bridge rect. 45-0-45 is MAS permitted power supply voltage. (This will produce 30V across 8Ω which is 112.5W). Max off load voltage 125V. • Distortion: <0.1% max any frequency typ 0.08%, 0.01% @ 1kHz • Frequency Response: 20 - 20kHz ±0dB (-3dB @ 200kHz) • Sensitivity: 850mV p.p. for rated output • Impedance: 47kΩ • S/Noise: Over 100 dB W.R.T. 850mV • Stability: Unconditional  
Cat. AA-0382

**\$125.00**

**J-50** 50W RMS min into 8Ω, with 25-0-25 2A transformer, 1 x 4700F/50V filter cap each side and 3A bridge rect. All other specs the same or better than above. (Filter capacitor values must be doubled for use on 4Q loads)  
Both units measure 135 x 128 x 74(H)mm including heatsink.  
Cat. AA-0380

**\$99.00**

new for



## 30 + 30 Watt Stereo Amp

### INCLUDING PREAMPLIFIER

Fully built and tested with separate bass, treble, balance and volume controls. This superb amp has less than 0.1% distortion. There are inputs for microphone, phono and auxiliary (line) and all power supply components are on board. Just connect a transformer, speakers and a signal - and away you go! Requires 36-38VAC x 2.

Size: 186 x 145 x 40(H)mm

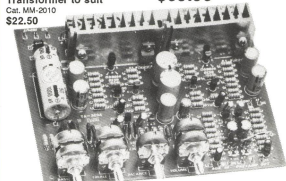
Cat. AA-0300

Transformer to suit

Cat. MM-2010

**\$22.50**

**\$69.95**

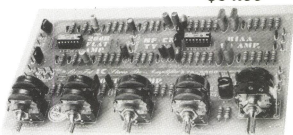


## Super Hi Fi BI-FET Preamp

### 0.005% DISTORTION

This magnificent preamp measuring 200(W) x 110(D)mm has many features: Phono in (RIAA equalisation within 0.2dB), phono out (to tape), and auxiliary input (as many as you like). Provision for switching 'loudness' control in or out as well as the provision for a 'tone defeat' switch. Bass, treble AND midrange controls are provided, as well as a midrange x 40 detent click type volume control. Naturally frequency response is flat over the audio spectrum and beyond and the S/N ratio figures are outstanding. (Requires ±15V 200mA power supply, a circuit for this is included). Size: 203 x 106 x 40(H)mm  
Cat. AA-0315

**\$84.95**



## 80 + 80 WRMS Pre-Main Amplifier

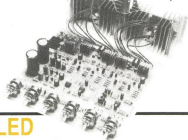
A complete preamp and high power amp - with power supply electronics and loudspeaker protector in the one package! All that you need to connect is a power transformer and a signal source.  
The AA-0310 features TWO huge heatsinks for the power transistors, bass, treble and mid-range controls, a microphone preamp and mixer pot, balance and volume control. There is a facility for the preamp out (to dub from source to tape) as well as phono out. All in all it's a very well thought out unit. The main board measures 245(W) x 240(D)mm, the heatsinks 130(W) x 75(D) x 70(H)mm are connected to the main amp board by about 150mm of wiring. Power requirements AC 26-32V x 2; DC +35V & +45V 6 amps.  
Cat. AA-0310

### 4361 TYPE POWER TRANSFORMER TO SUIT

Cat. MM-2015

**\$55.00**

**\$169.95**



## Dual LED Audio Level Meter Assembly

This meter enables you to display power levels from -30dB to +5dB. The meter operates directly from the output of your amplifier i.e. from the speaker leads. It does not consume any amplifier power. The level meter is powered by any voltage between the range 3-20 volts so it is ideal for 12V auto use.  
Ten LEDs are provided for each channel, the first 4 LEDs in each channel are green (-30 to -5dB), the next two are yellow (-1 to 0dB) and the next three are red (+1 to +5dB) a peak yellow LED is also used to indicate an overload condition. The meter can be calibrated to operate on amplifiers from 1 - 200 watts! A circuit for mains power supply is included. Size: 160 x 56 x 20(H)mm.  
Cat. AA-0326

**\$39.50**



**MAIL ORDERS-INQUIRIES 02 747 1888**

Pre Built Modules

**When is a kit not a kit?  
When it's a mini module!**  
Jaycar mini modules are not kits under normal definition. Each module is actually built, tested and guaranteed. You still have to connect them to power supplies, signal sources, etc., however, they are still kits and therefore fun to work with.

## 6 Watt 'Micro' Amplifier 1 Channel

### AMPLIFY YOUR WALKMAN!

This little amplifier will provide up to 6 watts into 4 ohms from a 15V power supply\*. The mighty midget measures 50mm square and has an onboard volume control. Facilities are provided to accept high or low impedance inputs, i.e. 'low' headphone output of cassette deck, 'Walkman' type unit, etc., and 'high' for standard line level signal sources such as tuners, VCR's, etc. (Regard as 'AUX'). Output is short circuit protected.

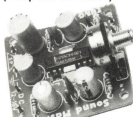
\*A copper heatsink fin must be soldered to the top of the IC to achieve this. Size 50x50x24(H)mm

#### SPECIFICATIONS

Power Out	6W (max) into 4 ohms
Input Sensitivity	100mV
T.H.D.	0.3%
Gain at 6V	38dB
Power Supply	4 - 16V at 1-2A
Cat. AA-0340	

**\$15.95**

(2 required for stereo)



## Mini Phono & Mic Preamp

This unit features a high slew rate op-amp type gain block 5% RIAA equalisation capacitors and small size 70(W) x 60(D)mm. It will bring up a magnetic phono cartridge or dynamic microphone to line level with very low distortion. Power supply circuit diagrams included. Power supply 18-22V AC x 2; +30V DC. Size: 72 x 60 x 20(H)mm. Cat. AA-0324



**\$22.95**

## Infra Red Remote Control System

The system comprises two basic components, the handheld transmitter and the receiver. The handheld transmitter is supplied in an attractive plastic case and is powered by a 9V battery. It has a range of 10 metres, approximately. The receiver consists of a circuit board measuring 110(L) x 55(W)mm and requires 9-12VDC. Both transmitter and receiver use a proprietary Hitachi encoder/decoder IC set to preclude false triggering by daylight, sparks, flashes, etc. The receiver output is by relay with N.O. or N.C. output. The relay is NOT 240V AC mains rated but will switch considerable DC loads i.e. 5 amps (resistive) at 12-24V or up to 100V AC. An on-board switch configures the unit to either operate only while the transmitter switch is held 'on' or alternatively in latch mode, i.e. press transmit button and switch 'on', press again to switch off.

P.S. It also works as an event counter! Size Transmitter 140 x 68 x 31(H)mm Size Receiver 107 x 57 x 20(H)mm. Cat. AA-0346



**\$52.95**



(Battery shown for scale)

## TURN YOUR SURPLUS STOCK INTO CASH!!

Jaycar will purchase your surplus stocks of components and equipment. We are continually on the lookout for sources of prime quality merchandise.

**CALL GARY JOHNSTON OR BRUCE ROUTLEY NOW ON (02) 747 2022**

## Stereo Loudspeaker Protector

An absolute must for all high power amplifiers. If anything goes wrong with a high power amp that is O.C.I.\* (i.e. does not have a large output capacitor between the final output stage and the speakers) a very high power source of DC can present itself directly across the voice coils of your expensive speakers destroying them probably before a fuse blows. The AA-0320 measuring 85(W) x 65(D) x 35(H)mm draws very little current at 12V DC. (A circuit showing how to connect it inside an existing amp is shown as well as a separate power supply). The protector has a 3 second de-thump turn on delay and a DC fault sense circuit. The protector relay is massive and will not offer any significant voltage drop in even the highest power amps. Cheap insurance.

\*Output capacitor-less. The enormous bulk of Hi Fi and PA amps are now built this way. Power supply DC 12-16V. Size: 90 x 55 x 23(H)mm. Cat. AA-0320



**\$27.95**

## 500mW @ 6V Audio Amplifier

A six transistor 1/2 watt amp for the cost of two hamburgers! It has a two transistor tape preamp which is NAB equalised and a 4 transistor power amp. It has facilities to take line level inputs. The (irregularly shaped) board measures roughly 110(L) x 48(W)mm. Each amp comes with complete schematic and connection diagram. (2 required for stereo). Cat. AA-0290

**\$3.95**

10+ \$3.50 ea

## Sound Operated Switch

This compact 70(L) x 45(W)mm switch will detect a sharp sound and latch a relay with N.O. and N.C. output. It runs from 9-12 volts and has adjustable sound level sensitivity. Size: 73 x 47 x 17(H)mm. Cat. AA-0342

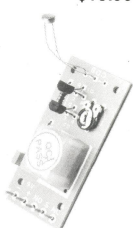


**\$23.50**

## Light Operated Switch

This controller uses a Cadmium Sulphide (CdS) cell to detect an ambient light level, the sensitivity is adjustable. When the level of light reaches a certain value the relay (with N.O. or N.C. outputs) switches on, it remains on until the light level falls below a predetermined value. The relay will switch up to 200 watts (resistive) but is not mains rated. Ideal as an event counter. Power supply 9V. Size: 67 x 31 x 17(H)mm. Cat. AA-0344

**\$10.95**



## Solar Powered 150 Experiments

This experimenters kit enables the enquirer to verify many of the fundamental physical aspects of solar energy for him or herself. The experiments range from the very basic to the very challenging. Some require considerable ingenuity and resourcefulness.

150 experiments include: solar furnace, stroboscope, electroplating, electronic thermometer, solar powered fan, etc. Components supplied include: large solar cell, motor, sensitive meter movement, thermometer, parabolic reflector and dozens of other parts. (Does not require batteries). Supplied in attractive gift box measuring 410(W) x 305(D) x 85(H)mm. Age 10+. Cat. KJ-6692



**\$39.95**

## Cone Tweeter

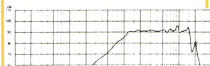
The newest edition to our speaker range. Foster C06N09, 70mm cone.

**Norm Impedance** 8 ohms  $\pm 15\%$   
**Max Power** 75 watts  
**Freq. Range** 3,000 to 16,000Hz  
**SPL** 91.5dB  $\pm 2$ dB/W  
**Flux Density** 7,200 Gauss  
**Magnet Size** dia 45 x dia 22 x 8mm  
**Magnet Weight** 47.4 grams (1.67 oz)  
**Net Weight** 170 grams (6 oz)  
**Dim:** A 106, B 90, C 72mm  
**Cat:** CT-2000

**\$9.95**

10+ \$9.25 ea

new for 88

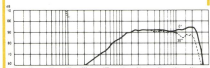
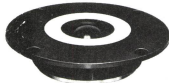


## Foster Dome Tweeter

The D025N25 is a brilliant tweeter. It's probably the cleanest sounding tweeter we sell. It handles enormous amounts of power and has a very smooth response.

**Power Handling** 150 watts RMS system  
**Freq. Response** 3,000 - 30,000Hz  
**Resonant Freq.** 1,200Hz  
**Impedance** 8 ohm  
**SPL** 91dB/1 metre  
**Flux Density** 13,500 Gauss  
**Weight** 610 grams  
**Dim:** A 120, B 108, C 95mm  
**Cat:** CT-2018

**\$36.50**



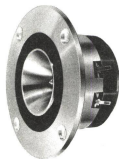
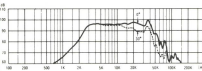
**JAYCAR**  
**No.1**  
**FOR**  
**SPEAKERS**

## Foster Horn Tweeter

This tweeter is brilliant. It is very bright with a crisp sound.

**Power Handling** 100 watts RMS system  
**Freq. Response** 5,000 - 40,000Hz  
**SPL** 96dB/1 metre  
**Impedance** 8 ohm  
**Flux Density** 11,500 Gauss  
**Net Weight** 490 grams  
**Dim:** A 97, B 85, C 65mm  
**Cat:** CT-2016

**\$32.50**



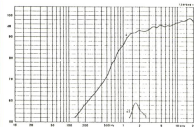
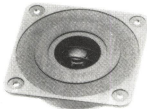
## Philips Dome Tweeter AD11610/T8

Philips best tweeter. Exposed textile dome for superior transient response and incredibly wide dispersion.

### SPECIFICATIONS

**Magnet** 240 gram  
**System Power** 100 watts  
**Freq. Range** 750 - 22kHz  
**Resonance** 1250Hz  
**Voice Coil** 25mm diameter  
**Dim:** A 101, B 108, C 85mm  
**Cat:** CT-2012

**\$26.50**



## Vifa D19 Tweeter

19mm dome tweeter with polymer diaphragm. Very smooth and versatile.

Ferrofluid cooled voice coil ensures high power handling and perfect damping.

Suited for any quality 2, 3 and 4 way system with power handling up to 100 watts RMS.

**SPECIFICATIONS**  
**Nominal Impedance** 8 ohms  
**Frequency Range** 2.5 - 20kHz  
**Free Air Resonance** 1700Hz  
**Sensitivity** 89dB 1 watt @ 1 metre

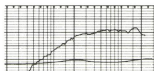
**Nominal Power** 80 watts (fo):  
 5000Hz, 12dB/oct  
**Voice Coil Diameter** 19mm  
**Voice Coil Resistance** 6.2 ohms  
**Moving Mass (incl. air)** 0.2 grams  
**Weight** 0.28 kg

**Dim:** A 97, C 75

B three holes only 72mm

**Cat:** CT-2019

**\$55.00**



## Vifa D25 Tweeter

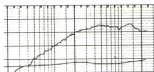
25mm dome tweeter with polymer diaphragm. Larger and more powerful version of the DT19TD.

Smooth and detailed performance with low colouration. Ferrofluid cooled voice coil makes this tweeter suited for high powered 2, 3 and 4 way systems up to 150 watts RMS.

**SPECIFICATIONS**  
**Nominal Impedance** 6 ohms  
**Frequency Range** 2 - 24kHz  
**Free Air Resonance** 1500Hz  
**Operating Power** 3.2 watts  
**Sensitivity** 90dB 1 watt @ 1 metre

**Nominal Power** 90 watts  
**Voice Coil Diameter** 25mm  
**Air Gap Height** 2mm  
**Voice Coil Resistance** 4.7 ohms  
**Moving Mass** 0.3 grams  
**Weight** 0.53 kg  
**Dim:** A 103, B 95, C 75mm  
**Cat:** CT-2020

**\$74.00**



**Dimensions of speakers:**  
**A** From one side to the other  
**B** Mounting holes (diagonal)  
**C** Cut out - in mm

Speakers

## Motorola Piezo Tweeters

### Motorola KSN 1089A

3" DIRECT RADIATING TWEETER  
Looks like a normal 3" cone tweeter, except it doesn't need a crossover. Ideal for Hi Fi systems in the home or car sound.

Dim: A 84, B 75, C 63mm  
Cat. CT-1908

**\$9.95**



NEW FOR 88

### Motorola - KSN 1135

Brand new model for 1988. Looks very much like the 1005A (CT-1910) but handles 75 watts rms instead of 100 watts rms. SPL 96dB. Replaces those Asian speakers with the original for less money. No crossover required.

Dim: A 85, B 100, C 75mm  
Cat. CT-1908

**\$14.95**



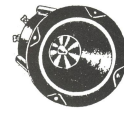
NEW FOR 88

### Motorola KSN 1038

Over 100 watts rms, frequency 4 - 30kHz. No crossover required. Especially suited for Hi Fi.

Dim: A 100, B 85, C 70mm  
Cat. CT-1914

**\$18.95**



## Motorola KSN 1005A

### 90mm SUPER HORN

Perfect for use where long throw is needed. PA's and musical instrument use. Frequency response 3.8 - 28kHz  $\pm 3dB$ , maximum input 25V rms (100W amp power), no crossover required.

Dim: A 85, B 100, C 76mm  
Cat. CT-1910

**WAS \$26.50**

**\$19.95**



## Motorola KSN 1016

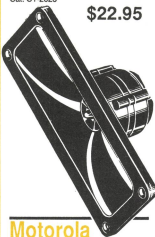
### 50 x 125mm

This exponential horn has a full 90° horizontal dispersion angle. With harmonic distortion of less than 1%, this unit is ideal for Hi Fi use. Frequency range 3 - 30kHz  $\pm 3dB$ , maximum input 25V rms, no crossover required.

Dim: A 145 x 67, B 133 x 50, C 122 x 55mm  
Cat. CT-2026

**WAS \$26.50**

**\$22.95**



## Motorola KSN 1025A

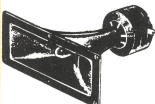
### 50 x 150mm Rectangular

Widest frequency range of the piezo horns, otherwise similar to the CT-2026. No crossover required.

Dim: A 100, B 85, C 70mm  
Cat. CT-1912

**WAS \$34.50**

**\$29.95**



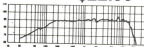
## Foster 4" Widerange C100K03

This very popular widerange/midrange is ideal where high quality is needed, but where space is at a premium.

### SPECIFICATIONS

Impedance 8 ohms  
Power 3 watts  
Max Power 10 watts  
Resonant Freq. 80  $\pm 15Hz$   
Freq. Range 10 - 17kHz  
SPL 90  $\pm 2dB/W$   
Flux Density 10,000 Gauss  
Dim: A 126, B 115, C 102mm  
Cat. CE-2312

**\$22.95**



## 6" Twincone Widerange

Good quality 6" dual cone speaker for replacements on small boxes. Foam surround with black cone and rubber mounting seal.

Freq. Resp. 60 - 15kHz  
Sensitivity 89dB/1m  
Impedance 8 ohms  
Power 10 watts rms  
Magnet Weight 5.3 oz  
Dim: A 168, B 157, C 145mm  
Cat. CE-2320

**\$16.95**

**10+ \$15.95 ea**

NEW FOR 88



## Economy 8" PA

This speaker has high efficiency and is ideal for extension speaker and low level sound reinforcement use. The heavy magnet and dual cone results in a wide frequency response. Power handling 10 watts, 200mm diameter, frequency range 60 - 18kHz.

Dim: A 205, B 197, C 187mm  
Cat. CE-2326

**10 or more**

**\$13.95 \$13.50 each**



### ALL SPEAKER MEASUREMENTS:

A From one side to the other  
B Mounting holes - diagonal  
C Cutout

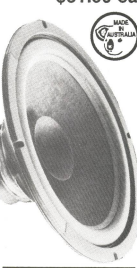
## Magnavox 8JX

The 8JX is a 8" twin cone speaker suitable for medium power handling applications.

### SPECIFICATIONS

Power Handling 40 watts RMS  
Resonant Freq. 44Hz  
Freq. Range 10 - 12kHz  
Sensitivity 93dB  
Voice Coil Dia. 25mm  
Magnet Weight 190g  
Dim: A 210, B 200, C 190mm  
Cat. CE-2333

**\$31.50 ea**



## Magnavox 8WR-076

The 8WR is a high fidelity wide range 8" driver utilising a 25mm diameter long throw voice coil wound on an aluminium former and a high compliance suspension with a polyurethane foam roll surround. An auxiliary cone has been fitted to extend the high frequency response by over 1 octave.

### SPECIFICATIONS

Power Handling 65 watts RMS  
Sensitivity 43Hz  
Freq. Range 10 - 12kHz  
Sensitivity 96dB  
Voice Coil Dia. 25mm  
Magnet Weight 350 grams  
Oms 2.19  
Oes 0.66  
Oto 0.51  
Vis 63.61

Dim: A 210, B 200, C 190mm  
Cat. CE-2338

**\$36.50 ea**



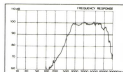


## Polypropylene Cone Midrange

A great new midrange to match our range of poly cone woofers. Clear cone with foam surround.

System Power Handling	100 watts RMS
Freq. Response	300 - 8,000Hz
Resonant Freq.	500 Hz
SPL	90dB/1w
Dim: A 130, B 120, C 110mm	
Cat. CM-2085	

NEW FOR  
**88**



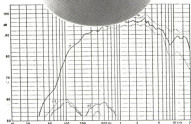
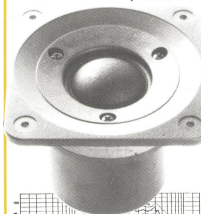
**\$29.95**

## Dome Midrange AD02110/Sq8

This great dome midrange as used in the ET4000 speaker kit is now available again.

Freq. Response	550 - 5kHz
Resonant Freq.	360Hz
Power Handling	100 watts RMS (system)
Flux Density	0.9 T
Loudspeaker Mass	1kg
Textile dome and an acoustically sealed pot.	
Dim: A 133, B 160, C 134mm	
Cat. CM-2088	

**\$62.50**



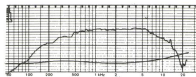
Dimension of speakers:  
A from one side to the other  
B Mounting holes (diagonal)  
C Cut out - in mm

## Vifa D75 Dome Midrange

Unusual 3" dome midrange with coated soft textile diaphragm. Very smooth and detailed performance with excellent dispersion and clarity. 75mm voice coil ensures high power handling and superb transient response. Requires a 1.5 litre sealed and damped enclosure. Optimal midrange in 3 and 4 way systems with a power handling up to 150 watts rms.

Nominal Impedance	8 ohms
Frequency Range	350 - 5kHz
Free Air Resistance	300Hz
Sensitivity	91dB 1 watt @ 1 metre
Nominal Power	80 watts (to 500Hz)
	12dB/oct
Voice Coil Diameter	75mm
Voice Coil Resistance	7.2 ohms
Moving Mass (incl. air)	3.6 grams
Weight	0.65 kg
Dim: A 150, B 133, C 112mm	
Cat. CM-2086	

**\$129.00**



## Horn Midrange

These all metal horn speakers will add life to your disco sound system or band speakers. Use one of the piezo tweeters for the top end and truly great sound. Rated at 30 watts rms, in a system they will handle over 100 watts rms.

### TWO CONVENIENT SIZES

**4" x 10 1/2"**

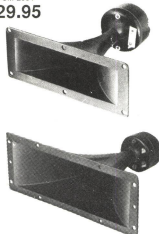
Impedance	8 ohms
Rating	30 watts rms
Response	1.5kHz - 14kHz
Dimensions	102 x 268 x 192mm
Dim:	
Cat. CM-2082	

**\$44.50**

**3" x 7"**

Impedance	8 ohms
Rating	30 watts rms
Response	2kHz - 15kHz
Dimensions	183 x 75 x 163mm
Dim: A 175 x 75, B 2 x 83 x 65, C 150 x 52mm	
Cat. CM-2084	

**\$29.95**



## 12" Guitar Speaker

Finally available, our updated guitar speaker with extended frequency response. Especially suited for not only Bass guitar but Rhythm and Lead as well.

Resonant Freq.	60Hz (was 80Hz)
Impedance	8 ohm
Freq. Response	60 - 8,000Hz (was 80-4kHz)
Power Handling	100 watts RMS
Magnet Weight	40oz
Net Weight	3610g (was 3520g)
Sensitivity	102dB

But the best news is the price - NO INCREASE

Cat. CG-2380

**\$89.50**



NEW FOR  
**88**

## Polyswitches

### LOW COST SPEAKER PROTECTION

REF: EA JULY 1986

The very latest in speaker protection, Polyswitch protectors are based on conductive polymers and act like resettable solid state circuit breakers. When the operating current of the protector is exceeded the interior of the device partially melts, which suddenly increases the volume which increases the resistance drastically. This in turn reduces the current. The device stays in this state while the current is maintained because its temperature is elevated. Once the current is removed, the device re-establishes itself almost immediately, so that the low resistance value is restored. Two of these devices are available from Jaycar. Simply connect them in series with the speakers you wish to protect.

**RN3410** is suitable for protection of tweeters in systems up to 100 watts. It's rated at 50 volt and 0.5 amp. Nominal resistance is 0.4 ohms.

Cat. RN-3410

**\$8.50 ea 10+ \$8.00 each**

**RN3415** will protect midrange and woofers up to 100 watts. Rated at 50 volts and 1.15 amps. Nominal resistance is 0.12 ohms.

Cat. RN-3415

**\$8.95 ea 10+ \$8.50 each**

**RN3418** is rated at 50 volts at 2.45 amps. Nominal resistance is 0.039 ohms. As used in 100 watt amplifier module Cat. KC-5019 from Silicon Chip Dec. 1987

Cat. RN-3418

**\$10.95 ea 10+ \$10.50 each**



## 6" Polypropylene

Power Handling	40W rms	Cat. CW-2108
Impedance (400Hz)	8 ohm	
Freq. Response	33.5 - 3000Hz	
Resonant Freq.	33.5Hz	
Sensitivity	87dB	
Voice Coil	25mm	
Nett Weight	900 grams	
O	0.318	
Qe	2.724	
Dim: A 165, B 157, C 144mm		

**\$34.50**



## 8" White Cone Woofer

Best looking and sounding 8" woofer we've seen for the price. White cone, large magnet 10oz, roll surround.

Power Handling 30 watts rms  
Resonant Freq. 45Hz  
Freq. Response 45 - 5000Hz  
Impedance 8 ohm  
Sensitivity 96dB  
Dim: A 211, B 200, C 185mm  
Cat. CW-2111

**\$26.95**



## Magnavox 8W-020

The 8W Mk 6 is a high fidelity woofer utilising a 25mm diameter long throw voice coil wound on an aluminium former and a high compliance suspension with a polyurethane foam roll surround, resulting in excellent linearity at high power.

Power Handling 65 watts rms  
Resonant Freq. 43Hz  
Freq. range 10 - 5kHz  
Sensitivity 96dB  
Voice Coil Dia. 25mm  
Magnet Weight 350 grams  
Oms 2.19  
Qes 0.66  
Qto 0.51  
Vas 63.61  
Dim: A 205, B 195, C 183mm.  
Cat. CW-2109

**\$36.50**



Dimensions of speakers:  
A From one side to the other  
B Mounting holes (diagonal)  
C Cut out  
In mm

## 8" Polypropylene

Power handling	60 watts rms system
Impedance	8 ohms
Resonant Freq.	35Hz
Sensitivity	88dB 1 metre 1 watt
Effective Freq.	35 - 4000Hz
Electromagnetic Q	QES 0.35
Peak Cone Excursion	2.5mm
Dim: A 240, B 220, C 180mm	
Cat. CW-2114	

**\$49.95**



## Philips 8" Woofer AD80652/W8

Ideal for small sealed enclosures. Maximum enclosure volume 8.25 litres. Great bass. Recommended cross-over frequency 2.5kHz.

Freq. Response 50 - 4kHz  
Resonant Freq. 35Hz  
Power Handling 80 watts rms  
Flux Density 1.2T  
Total Moving Mass 17.5 g  
Compliance - Sple. Unmounted 1.02mm/N  
Voice Coil Height 10mm  
Cone Diameter 25mm  
Magnet Mass 450 grams  
Mass of Speaker 1.15kg  
Paper cone and polyester surround  
Dim: A 205, B 195, C 185mm  
Cat. CW-2115

**\$49.50**



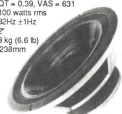
## Etone 10" Subwoofer

As used in the Electronics Australia subwoofer system.

Size 10" (250mm)  
Cast Frame QT = 0.39, VAS = 631  
Power Handling 100 watts rms  
Free Air Resonance 32Hz  $\pm$  1Hz  
Voice Coil Dia. 2"

Magnet 3 kg (6.6 lb)  
Dim: A 268, B 250, C 238mm  
Cat. CW-2119

**\$119.50**



## Magnavox 8MV-003 8/30 Replacement

If you own a pair of 8/30 woofers, you can now easily update them. Your old 8/30's handle 30 watts rms, the new 8MV's handle 120 watts rms. No need to buy new cabinets. 8MV's mounts in the same hole, otherwise it's a high quality, high power 8" woofer for most applications.

Power Handling	120 watts rms
Resonant Freq.	31Hz
Freq. Range	10 - 4kHz
Sensitivity	95dB
Voice Coil Dia.	38mm
Magnet Weight	510 grams
Oms	1.73
Qes	0.47
Qto	0.37
Vas	801
Dim: A 220, B 225, C 210mm	
Cat. CW-2110	

**\$99.50 ea**



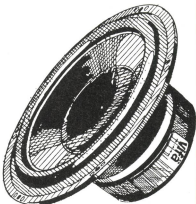
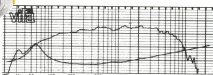
## Vifa P21 8" Woofer

8" Polycone woofer with large magnet and diecast magnesium basket for highest rigidity. Can be used in 25 - 45 litre bass reflex enclosures. Ideal in both 2 and 3 way systems. 70 watts power handling capacity.

Nominal Impedance	8 ohms
Freq. Range	26 - 4kHz
Free Air Resonance	33Hz
Operating Power	2.5 watts
Sensitivity	92dB 1 watt @ 1 metre
Nominal Power	60 watts
Voice Coil Diameter	40mm
Voice Coil Resistance	5.8 ohms
Moving Mass	20 grams
Thiele:Small	Qm : 2.4
Parameters	Qe : 0.41
	Qt : 0.35
	Vas : 80.1
	1.65 kg

Weight  
Dim: A 215, B 207, C 182mm  
Cat. CW-2132

**\$188.00**



## 10" Polypropylene

Power Handling 70 watts rms system  
Impedance 8 ohms  
Resonant Freq. 30Hz  
Sensitivity 90dB 1 metre 1 watt  
Effective Freq. 30Hz - 4,000Hz  
Electromagnetic Q OES 0.36  
Peak Cone Exc. 2.5mm  
Dim: A 263, B 243, C 233mm  
Cat. CW-2116

**\$59.50**



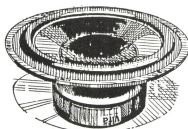
## Vifa P25 10" Woofer

This 10" Polycarbonate woofer is the largest in the Polycarbonate range. Large magnet, diecast magnesium basket and rubber surround. Designed for 3 way bass reflex systems with a volume of 50 - 100 litres. 75 watts power handling capacity.

Nominal Impedance 8 ohms  
Freq. Range 25 - 3kHz  
Free Air Resonance 25Hz  
Operating Power 5 watts  
Sensitivity 89dB 1 watt @ 1 metre  
Nominal Power 60 watts  
Music Power 100 watts  
Voice Coil Diameter 40mm  
Voice Coil Resistance 5.7 ohms  
Moving Mass (incl. air) 44 grams  
Thiele/Small Dim: 3.15  
Parameters Qe: 0.46  
Ql: 0.40  
Vas: 180l  
Weight 1.95 kg

Dim: A 256, B 252, C 228mm  
Cat. CW-2136

**\$220.00**



**JAYCAR  
No.1  
FOR  
SPEAKERS  
&  
ACCESSORIES**

## Magnavox 10W-031

The 10W is a 10" high quality, high power, medium priced speaker which is made in Australia. 25mm voice coil wound on aluminium former. Polyurethane foam roll surround.

Power Handling 75 watts RMS  
Freq. Response 33Hz - 5,000Hz  
Resonant Freq. 33Hz  
Magnet Weight 350 grams  
Sensitivity 95dB  
Oms 2.9  
Qes 0.841  
Qto 0.65  
Vas 156l  
Cat. CW-2118

**\$43.50**



**new for**

## 15" Woofer 120 Watt RMS Polypropylene

Power Handling 120 watts RMS  
Resonant Freq. 23Hz  
Impedance 8 ohm  
Freq. Response 23 - 2,000Hz  
Sensitivity 93dB  
Voice Coil Dia. 38mm  
Electromagnetic Q 0.22  
Weight 1410 grams  
Dim: A 384, B 375, C 354mm  
Cat. CW-2131

**\$179**



## 12" Woofer Polypropylene

Power Handling 80 watts rms system  
Impedance 8 ohms  
Resonant Freq. 25Hz  
Sensitivity 92dB 1 watt 1 metre  
Effective Freq. Res. 25 - 4,000Hz  
Electromagnetic Q OES 0.39  
Peak Cone Excursion 2.5  
Dim: A 310, B 293, C 276mm  
Cat. CW-2130

**\$69.50**



## Magnavox 12MV-012

The 12MV is a high power high fidelity woofer utilising a 38mm diameter long throw voice coil wound on an aluminium former and high compliance suspension with a polyurethane foam roll surround, resulting in excellent linearity at very high input powers.

Power Handling 150 watts rms  
Resonant Freq. 19Hz  
Freq. Range 10 - 3kHz  
Sensitivity 96dB  
Voice Coil Dia. 38mm  
Magnet Weight 510 grams  
Oms 3.76  
Qes 0.56  
Qto 0.49  
Vas 620l  
Dim: A 340, B 323, C 280mm  
Cat. CW-2125

**\$99.50 ea**



**new for**

## Magnavox 12W - 099

12" woofer, medium power, low cost, high quality. 25mm voice coil wound on aluminium former. Polyurethane foam roll surround.

Power Handling 80 watts RMS  
Freq. Response 30 - 5,000Hz  
Resonant Freq. 30Hz  
Magnet Weight 350 grams  
Sensitivity 96dB  
Oms 3.76  
Qes 1.23  
Qto 0.93  
Vas 263l  
Cat. CW-2122

**\$52.50**



Dimensions of speakers:  
A From one side to the other  
B Mounting holes (diagonal)  
C Cut out - in mm

**CARLINGFORD 872 4444**

*Speakers*

# Special Announcement new for 88

Jaycar has just concluded a deal with a well known AUSTRALIAN MANUFACTURER to produce a high quality but modestly priced range of Polypropylene cone speakers.

The speakers are made according to Jaycar's rigid specifications and will only be available from Jaycar. The range includes woofers sizes 6, 8 & 10" diameter. A matching midrange and tweeter (both overseas made) will also be available.

The speakers have black square metal frames with grey polypropylene cones and dark grey suspension. We are very proud of these world-class Australian made polypropylene cone speakers.

## JC-150 6" Woofer

Impedance 8 ohm  
Resonant Freq. 49Hz  
SPL 95dB/1 watt @ 0.5 metre  
Power Handling 50 watts RMS  
Freq. Response 80 - 6000Hz  
Qms 1.73  
Qes 0.52  
Qto 0.4  
Vas 22.2  
Cat. CW-2105

**\$39.95**



## JC-200 8" Woofer

Impedance 8 ohm  
Resonant Freq. 39Hz  
SPL 95dB/1 watt @ 0.5 metre  
Power Handling 65 watts RMS  
Freq. Response 50 - 5500Hz  
Qms 1.89  
Qes 0.64  
Qto 0.48  
Vas 59.6  
Cat. CW-2112

**\$49.95**



new for 88

## JC-250 10" Woofer

Impedance 8 ohm  
Resonant Freq. 28Hz  
SPL 97dB/1 watt @ 0.5 metre  
Power Handling 75 watts RMS  
Freq. Response 45 - 4500Hz  
Qms 3.54  
Qes 0.85  
Qto 0.68  
Vas 170  
Cat. CW-2120

**\$64.95**



## JC-125 5" Midrange

Impedance 8 ohm  
Resonant Freq. 700Hz  
Freq. Response 700 - 13,000Hz  
Power Handling 80 watts RMS system  
SPL 91dB  
Cat. CM-2081

**\$19.95**



## JC-75 3" Tweeter

Impedance 8 ohm  
Resonant Freq. 1000Hz  
Freq. Response 1000 - 18,000Hz  
Power Handling 80 watts RMS system  
SPL 91dB  
Cat. CT-2005

**\$12.95**



new for 88

## All Purpose Replacement Speakers

### Mini Speaker

**2 1/4" \$2.20 ea**  
10+ \$1.80 ea

57mm dia.  
As used in many projects  
Cat. AS-3000



**3 1/4" \$5.25**  
10+ \$5.00 ea

Cat. AS-3006



**4" \$6.95**  
10+ \$6.50 ea

100mm diameter.  
Cat. AS-3008



**5" \$8.95**  
10+ \$8.50 ea

125mm diameter  
Cat. AS-3010



**6" \$11.95**  
10+ \$11.50 ea

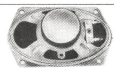
165mm diameter  
Cat. AS-3012



## Car Replacements

**8" x 4" Cat. AS-3014**  
\$10.95 ea 10+ \$10.00 ea

**7" x 5" Cat. AS-3016**  
\$12.50 ea 10+ \$12.00 ea

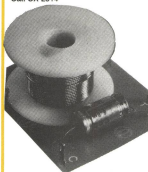




## 2 Way Crossovers

### 2 Way Type 1

- Crossover frequency 3,500Hz
- 6dB attenuation
- 40 watts RMS
- 8 ohms
- Cat. CX-2614



\$9.95 ea

### 2 Way Type 2

- Crossover frequency 5,000Hz
- 6dB attenuation
- 40 watts RMS
- 8 ohm
- Cat. CX-2613



\$9.95 ea

### 2 Way Type 3

- Crossover frequency 3,500Hz
- 12dB attenuation
- 50 watts RMS
- 8 ohms
- Cat. CX-2612

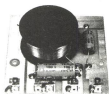


\$13.95 ea

### 2 Way Type 4

new for 88

- Crossover frequency 2,000Hz
- 6dB attenuation
- 65 watts RMS
- 8 ohms
- Cat. CX-2611



\$18.95 ea

### 2 Way Type 5



- Vifa Crossover AEM 6102
- Crossover frequency 2,500Hz
- 18dB octave slope
- 80 watts RMS
- 8 ohms
- TILBROOK DESIGN
- Cat. CX-2630

HIGH QUALITY

\$178 pair

### 3 Way Crossovers

### 3 Way Type 1

- Crossover frequencies 800Hz, 5,000Hz
- 6dB attenuation
- 40 watts RMS
- 8 ohms
- Cat. CX-2615

\$15.50 ea



**JAYCAR  
No.1  
FOR  
SPEAKERS**

### 3 Way Type 2

- Crossover frequencies 2,800Hz, 8,000Hz
- 12dB attenuation
- 50 watts RMS
- 8 ohms
- Cat. CX-2617

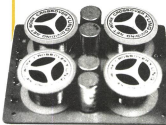


\$18.50 ea

### 3 Way Type 3

- Crossover frequencies 800Hz, 5000Hz
- 12dB attenuation
- 65 watts RMS
- 8 ohms
- Cat. CX-2616

\$28.95 ea



### 3 Way Type 4

- Crossover frequencies 600Hz, 3500Hz
- 12dB attenuation
- 80 watts RMS
- 8 ohm
- Cat. CX-2619

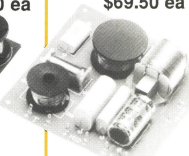
\$32.95 ea



### 3 Way Type 5

new for 88

- Crossover frequency 500, 3500Hz
- 12dB attenuation
- 200 watts RMS
- 8 ohms
- Cat. CX-2621



\$69.50 ea

### 3 Way Type 6



- Vifa crossover AEM 6103
- Crossover frequencies 500, 4500Hz
- 18dB octave slope
- 120 watts RMS
- 8 ohm
- TILBROOK DESIGN
- Cat. CX-2632

HIGH QUALITY

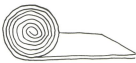
\$238 pair

### Innerbond

Innerbond is the ideal substance for lining the insides of speaker cabinets. It has excellent damping properties and is clean and non-irritating, unlike many substitutes. Use the best! Comes on a roll approx. 900mm wide. Thickness is 25mm.

Cat. AX-3690

\$5.95 per metre



### Velcro Tape

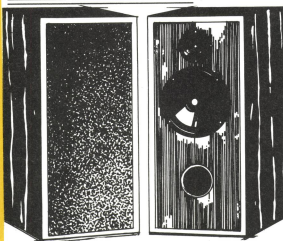
This tape is ideal for holding grilles on speaker cabinets. One side is glued or stapled to the box and the other to the grille. The grille then 'sticks' to the box. Comes as a pack of 2 rolls 300mm long.

Cat. CF-2763

\$3.95

Speaker Crossovers

## Vifa SA-100 2 Way Kit



This exciting new high-performance speaker kit uses VIFA drivers from Denmark. It is an improved version of the original David Tibbrook design AEM-6102 speaker kit. A new advanced crossover design with asymmetrical crossover slopes and impedance correction circuit gives these speakers an unequalled performance with any fully-imported loudspeaker system under \$2,000 a pair. Well over 1800 of the original AEM-6102 speaker systems have now been built in Australia with superb results. With a saving well in excess of \$1,000 compared to any fully imported loudspeaker system, it is now your amplifier and the rest of your ancillary equipment that sets the limit for your enjoyment of your hi-fi system. The speaker kit consists of the famous 8" polycone woofer with diecast chassis and rubber roll surround. The tweeters are of the famous 8" polycone woofer with diecast chassis and rubber roll surround. The tweeters are

the legendary D25 tweeter with ferro-fluid cooling and polymer diaphragms. The cabinet is supplied in knock-down form veneered in beautiful black woodgrain look with silver front baffles, speaker cloth, damping material, grill clips, speaker terminals, screws and ports. The performance of these speakers is outstanding. Australian Hi Fi magazine recently acclaimed: "Well, Mr Tibbrook and Scen have certainly done their homework. The AEM-6102 is simply superb. A very accurate design and exhibits remarkably low levels of colouration and distortion - across the board".

Power Handling 100 watts RMS.

### SPEAKER KIT

Cat. CS-2460

**\$651.00** pair

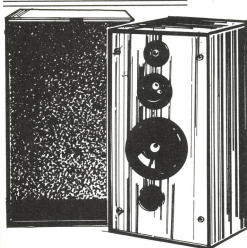
### CABINET KIT

Cat. CS-2462

**\$148.00** pair



## Vifa SA-130 Way Kit



roll surround. The new improved 3" dome midrange D75MX takes care of the critical midrange area, giving these speakers a most accurate and neutral performance, especially noticeable on human voices, which are produced with the highest fidelity.

A classic among dometweeters is the brilliant 19mm ferro-fluid cooled D19TD. Have a close look at all the imported English and European loudspeakers and you will find this little star in almost half of them. Not without reason! Its polymer diaphragm provides extremely clear and well balanced treble. The new VIFA SA-130 topmodel is available in kitform, either with or without flat-pack cabinets, finished in nice blackwood grain with silver baffle. Power handling 130 watts RMS.

### SPEAKER KIT

Cat. CS-2465

**\$951.00** pair

### CABINET KIT

Cat. CS-2467

**\$248.00** pair

## Improved AEM6103

In the past buying high quality loudspeakers has necessitated selecting a fully imported product. With the drastic devaluation of the Australian dollar these imported products have become out of the reach of most Hi Fi and electronic enthusiasts.

With the introduction of VIFA speakers in kit form 3 years ago, it has been proved that you now can build same quality loudspeakers as the expensive imported models (which might very well be using VIFA drivers anyway). The large floorstanding top-model AEM-6103, originally designed by David Tibbrook, has since been improved, and are now available in a new slimmer cabinet, with improved drivers and the latest European crossover technology. With a dispersion pattern linear up to 120° these new SA-130 are to be ranked among the finest imported speakers in the 2500-3000 dollar bracket.

The tight deepbass is produced by the powerful 10" Polycone-woofer P25W0, which has diecast magnesium basket, aluminium voicecoil former and rubber

## Vifa SA-70 2 Way Kit

### Improved EA 60/60

If your budget won't run to the \$800-\$1,000 needed for an equivalent pair of fully-imported loudspeakers, these speakers are the ones to go for. The new SA-70 is an improved version of the original EA-60/60 speaker kits released a year and a half ago in Electronics Australia magazine. 2,500 of these speakers have been built since their release and they have become one of the most popular bookshelf speakers in Australia. Everybody can build these speakers - no carpentry skill or electronics certificate is needed. Some extracts from EA magazine: "The tweeters are exotic little beasts! (Editor EA magazine). It is the all-time popular 19mm soft dome tweeter with ferro-fluid damped voice coil and very smooth frequency response.

The woofers are a new improved 8" sandwich-coated woofer with team surround.

A new crossover design extracts all the performance out of these exotic Danish loudspeaker drivers.

The power handling is increased to 70 watts RMS per channel, and in an average size lounge room driven by a 20-50 watt amplifier these speakers will reproduce all kinds of music with the highest fidelity. The construction of the speakers follows the usual principle of the knockdown flat-pack cabinets, pre-built crossovers and push on tags for the leads. A real winner. Power handling 70 watts RMS.

## SPEAKERS AND CROSSOVERS

Cat. CS-2471

**\$379**

## CABINETS TO SUIT

Cat. CS-2472

**\$120**  
**TOTAL \$499.00**



**LOOKOUT FOR THE NEW VIFA SA-50 2 WAY SPEAKER KIT INCORPORATING 5" BASS/ MIDRANGE AND A DOME TWEETER \$399 with cabinets**

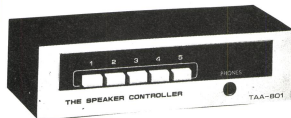
Call into any of our showrooms (not Concord) for an Audition

**SYDNEY-CITY 267 1614**

## Speaker Controller

Enables up to 5 pairs of stereo speakers to be switched on or off in any combination - rated at 50 watts continuous per channel. Stereo headphone socket available for private listening. Constant minimum load circuit protects amplifier regardless of how many speakers are connected. Dual circuit breaker protection. Cat. AC-1678

**\$57.50**



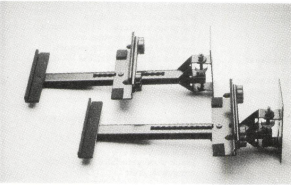
## Deluxe Speaker Mounting Bracket

The solution as to where to put your bookshelf speakers. These versatile brackets are mounted on the wall which means you can optimise your sound pleasure by placing your mini-midi speakers exactly in the position you want them. The swivel mount allows correct spatial positioning. Each bracket will handle up to 16kg (35lb).

- FEATURES:**
- 180° side/side swivel
  - 40° 15° tilt up/down
  - Depth up to 254mm (10")
  - Finished in black acrylic

Cat. AA-2060

**\$79 pair**



## Communication Speaker

If you are after a rugged heavy duty extension speaker, then this is the one. It will handle up to 25 watts maximum and the impedance is 8 ohms.

Speaker is a 3" foam suspension type and has a metal grille over the front to stop probing fingers, etc. Supplied complete with metal mounting bracket and 5 metres cable terminated with a 3.5mm plug. Cat. AS-3185

**\$22.95**



**new for**

## Speaker Sealant

This is a special non-hardening sealing compound, ideal for getting real airtight seals between drivers and cabinets. This is vital with the acoustic suspension designs popular today. 2 metre roll.

Cat. CF-2782

**\$2.95**

## 7-Way Speaker Switch

This stereo speaker switch will enable you to select any combination of three pairs of speakers. Comes complete with wall plate. Has easy to connect screw terminals. Full instructions supplied. Separate switch for each pair of speakers. Not the cheap rotary switch type. Cat. AC-1676

**\$24.95**

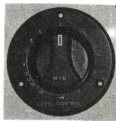


## Midrange & Tweeter Level Controls

These units are designed for midrange and tweeter controls on multiway speaker systems. They are suitable for systems up to 80 watts power handling capacity. They present a constant 8 ohm impedance to the load, and so do not disturb the crossover points. Both units come with fully sealed mounting plates and are labelled 'mid' and 'high' respectively.

**MIDRANGE**  
Cat. AC-1680  
**TWEETER**  
Cat. AC-1682

**\$7.95 ea**



## L-Pads

These function as a volume control directly at the speaker. They are similar to regular pots, but differ in that they present a constant load to the amplifier or crossover. (Important to maintain crossover performance).

## 100 Watt Mono Fader

This really is a high power unit ideal for PA applications or for remote speakers where a high powered amplifier is being used. Constant impedance design is suited to 8 ohm systems. Has heavy ceramic body and wirewound element. Supplied with metal silk screened fascia plate.

Cat. AC-1672

**\$18.50 ea**



## Grille Cloth

High quality, acoustically transparent grille cloth is ideal for protecting those expensive drivers - but making sure all of the sound gets through. Comes in a 1.5 x 1 metre roll. Black in colour. Cat. CF-2755

**\$12.50 metre**



## Speaker Grille Clips

Have you ever wondered how expensive speaker grilles are held in place? They use a plastic clip-in plug and socket. Now you can have them on your speakers instead of Velcro tape. SET OF 4 Cat. CF-2761

**\$3.95**

## 8" Speaker Ceiling Grille

This grille suits the CE-2325 8" speaker. Ideal for PA/background music systems, extension speakers, etc. White in colour. Cat. AX-3560

**\$3.95**

10+ \$3.75 ea

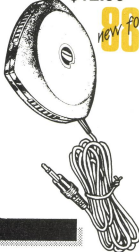


## Pillow Speaker

Great for night owls, don't disturb others around you. Slip it under the pillow and learn other languages, motivation courses, etc while you are sleeping.

Cat. AS-3050

**\$12.95**



**BRISBANE 07 393 0777**

## US telephone Type Leads/Connectors

### Extension Cable

US plug to US plug. Length 5 metres.  
Cat. YT-6040



**\$8.95**

### Extension Cable

US plug to US socket. Length 5 metres.  
Cat. YT-6046



**\$9.95**

### Extension Cable

Australian socket to US plug.  
Length 5 metres.  
Cat. YT-6044



**\$12.95**

### Line Cable

US plug one end to bare wires. Ideal for any application and solves crimping cable to US plug which is very difficult without special crimper. Length 2.5 metres.  
Cat. YT-6042



**\$4.95**

### Double Adaptor

To connect two telephones to the one socket  
Cat. YT-6056



**\$6.95**

## Curly Cord

US plug to US plug. Replacement handset cord. Length 4.5 metres.  
Cat. YT-6048



**\$12.95**

## Wall Socket

Standard US type wall socket.  
Cat. YT-6058



**\$4.95**

## Plug Adaptor

Australian plug to US socket.  
Cat. YT-6054



**\$8.95**

## Telephone Extension Cords/Double Adaptors

### 5 metre extension

4 wire, suitable for PBX and commander systems.  
Cat. YT-6010  
INCLUDES DOUBLE ADAPTOR



**\$10.95**

### 15 metre extension

2 wire, complete with adaptor built-in. Suits all standard telephones.  
Cat. YT-6015



**\$13.95**

## Telephone socket double adaptor

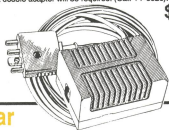
Cat. YT-6020



**\$7.50**

## Telephone Extension Bell

This compact unit is supplied with 10 metres of cord fitted with a standard Telecom plug. Simply plug it into a wall outlet and it will ring at the same time as your telephone. A LED is fitted as well which will flash. (Note: if you only have one telephone outlet a double adaptor will be required. (Cat. YT-6026).  
Cat. YT-6030



**\$24.95**

## STD Bar Finally Released

The STD Bar for your telephone is finally available. It appeared in our last catalogue but we were afraid to release it due to the safety aspect of 000 emergency number.

We have solved this problem, and the new model will allow emergency calls through on the 000 number, but will stop standard STD calls (except Tasmania).  
Cat. YT-6540



**\$34.95**

## Telephone Call Diverter

This is an exceptionally good diverter. It enables you to divert an incoming call on one line to another location. Many incoming callers do not like leaving messages on a machine and with a diverter the caller will not know that your office is unattended.

The YT-6510 will divert either line (2 lines required) or will divert one incoming line only. It can monitor incoming calls if you are there! The YT-6510 will redial at either 10 (standard) or 20 pulses/sec. If you are redialing to a 3 digit exchange (i.e. a 7 digit phone number) you can confidently set the diverter to redial at 20pps to save dialling time.

This diverter will work with either tone or pulse dialling systems and has other features that only relate to tone dialling.

While the YT-6510 is not Telecom approved, it is a very well made product. A 9V AC adaptor is provided.

- Excellent audio quality
- Time limit set on diverted calls
- User friendly

Cat. YT-6510

**\$199**





## Cordless Telephone

The fabulous Portable Telephone that you can take anywhere around the house, garden or swimming pool. YT-7065 is microprocessor controlled with a range of up to 250 metres and absolute clarity.

No other cordless phone has the quality, security and the features at anywhere near the affordable price of this phone. Tired of being tied to the phone when you have better things to do? Wouldn't it be wonderful if you could take the phone to where you want to be around the home, office or factory. You could be getting on with other things instead of worrying about missing a call! Now you can with the new generation cordless phone.

### Features:

- Simple to use and easy to install - just plug it in
- Operating range up to 250 metres (800ft)
- Security code system with 16,384 combinations
- Call function at base unit to alert handset
- Pulse dialling with audible tone feedback at the touch of a key

### SPECIFICATIONS:

Handset power DC 4.8V rechargeable  
Base unit 12V AC (Adaptor supplied)  
Base Unit Channel 3  
RX Sens 1uV  
RX Freq. 39.875MHz  
S/N Ratio 50dB  
TX Power Max permitted  
TX Freq. 30.175MHz

Channel 2  
1uV  
39.825MHz  
50dB  
Max permitted  
30.125MHz

Handset Channel 3  
RX Sens 1uV  
RX Freq. 30.175MHz  
S/N Ratio 45dB  
TX Power Max permitted  
TX Freq. 39.875MHz

Channel 2  
1uV  
30.125MHz  
45dB  
Max permitted  
39.825MHz

Cat. YT-7065

**\$199**

**SAVE \$60 on 1987 price**



## Digital Auto Tune Up Tester

Not only will this measure RPM & Dwell (on 8, 6, 5, & 4 cylinder cars) it measures AC volts, DC volts, points resistance, diode check and even has an ohms range! But its best feature is the nifty little tach adaptor supplied. It is a clamp-type unit with coiled lead. Simply connect the inductive pick-up to the coil HT lead and the RPMs are displayed!

The QM-1576 is moulded in dark green high impact plastic with in-built tilting ball. SPECIFICATIONS:

TACHO				
Cylinder	Range	Resolution	Accuracy	Overload Circuit Protection
4 & 5	300 - 5200rpm	10 rpm	1.2% ±	250V DC/AC RMS
6	200 - 4000rpm		10 rpm	(within 10 secs)
8	200 - 3000rpm			
DWELL ANGLE				
Cylinder	Range	Resolution	Accuracy	Overload Circuit Protection
4 & 5	0-90°	0.1°	1.2% ±1°	250V DC/AC RMS
6				(within 20 secs)
8				
AC VOLTAGE				
Range	Accuracy	Resolution	Input Resistance	Overload Circuit Protection
200V	1.2% ±1d	100mV	500k	DC ±600V
500V		1V		AC 500V RMS

General Specifications: • Display 0.5" (13mm) LCD (Liquid Crystal Display) max indication 1999 or -1999 • Polarity Bi-polar by automatic switching. "-" indicates reverse polarity • Zero adjustment automatic • Over input indicated by "1" or "-1" • Sampling time 0.4 sec • Power supply 9V battery • Consumption 32mW • Size 180 x 86 x 35mm • Weight 320 grams  
Supplied with comprehensive manual, multimeter type test leads and clamp type inductive pick-up tach adaptor.  
Cat. QM-1576

**\$139.50**

## Digital L-C Meter

This direct input product is outstanding value for money. It is moulded in a high impact dark grey plastic case with inbuilt tilting ball, includes spare fuse (built-in) and colour coded panel. A very comprehensive instruction manual is provided.

CAPACITANCE			
Range	Resolution	Test Freq.	Voltage across C under test
2nF	1pF	1kHz	150mV
20nF	10pF	1kHz	150mV
200nF	100pF	1kHz	150mV
2uF	1nF	1kHz	150mV
20uF	10nF	100Hz	150mV
200uF	100nF	100Hz	15mV
INDUCTANCE			
Range	Resolution	Test Freq.	Current thru H under test
2mH	1uH	1kHz	150uA
20mH	10uH	1kHz	150uA
200mH	100uH	1kHz	150uA
2H	1mH	1kHz	150uA
20H	10mH	100Hz	15uA

Specifications: • Accuracy (23°C±2°C) Capacitance <0.5uF - ±(1%+1d), >0.5uF - ±(2%+1d), Inductance <0.5uH - ±(2%+1d), >0.5uH - ±(5%+1d) • Temperature coefficient capacitance <0.5uF - 0.1%/°C, >0.5uF - 0.2%/°C, Inductance <0.5H - 0.2%/°C, >0.5H - 0.5%/°C • Zero error capacitance 2nF range, <5pF, Inductance <10uH • Over range - display shows "1" • Sampling time 0.4 secs • Power supply 9V battery 11mA (batt not supplied) • Size 180 x 85 x 35mm • Weight 320 grams  
Alligator clip test probes supplied. Auto zero except on lowest capacitance range.  
Cat. QM-1575

**\$219**



**new for 88**

**MELBOURNE - CITY 03 663 2030**

## Low Cost Test Gear for 1988

Jaycar is proud to announce a range of high quality direct import test equipment. This equipment was finally chosen because of its excellent value for money. We think that you will agree!

### Audio Generator

This unit matches the QT-2312 RF generator in appearance. It too has a sturdy metal cabinet with carrying handle and large readout scale. The QT-2310 has the following features:

- High frequency stability: within  $\pm 2\text{Hz}$
- Output voltage floating: within  $\pm 1\text{dB}$
- Sine wave signal output: more than 8V rms
- Equipped with synchronised input terminal of signals enabling high power output signals to be accurately controlled by small signals.

#### SPECIFICATIONS:

Frequency Range: 10Hz - 1MHz 5 decade bands  
Accuracy:  $\pm 3\%$   $\pm 2\text{Hz}$   
Output Impedance: 600 ohms, unbalanced  
Output Control: High, Low (40dB) and fine adjuster

#### SINE WAVE OUTPUT

Range: 10Hz - 1MHz  
Output Voltage: 8V rms, max  
Output Distortion: Less than 0.05% 400Hz - 20kHz  
Less than 0.3% 20Hz - 200kHz  
Less than 0.05% 500Hz - 50kHz  
Less than 0.5% 50Hz - 500kHz  
 $\pm 1\text{dB}$  (1kHz)

#### Output Flatness:

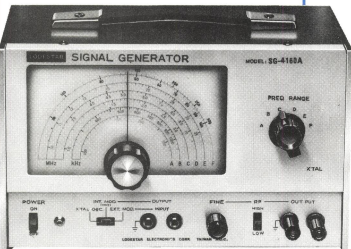
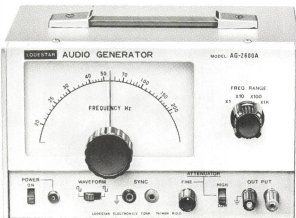
#### SQUARE WAVE OUTPUT

Range: 20Hz - 20kHz  
Output Voltage: 15V p-p max  
Rise Time: 0.5us

#### SYNCHRONISATION

Range: 33% of oscillator frequency per Vrms  
Input Impedance: Approx 10M ohm  
Maximum Input: 10V rms  
Power Requirement: AC 115/230V,  $\pm 10\%$ , 50/60Hz, 3VA  
Dimensions: 150(H) x 250(W) x 130(D)mm  
Weight: Approx 2.5kg  
Accessories: Test lead 1, ground lead 1

Cat. QT-2310



new for 88

\$239

## Digital 400 Amp AC Clampmeter

This is a direct import 1/2" LCD clampmeter with rugged hard vinyl carry case at an exceptionally low price - especially when you realise it has digital hold! (You can make a measurement in a dark and confined location, hold the data on the display until you can comfortably read it.)

The unit is overload protected, has a carrying lanyard and is moulded in a high impact dark grey plastic case.

#### SPECIFICATIONS

- AC Current
    - 20A (0.01A resolution)
    - 200A (1A resolution)
    - 1000A overload (1 minute)
  - Resistance
    - 2000 ohms (1 ohm resolution)
  - Diode check
  - AC Volts
    - 750 (1V resolution)
  - DC Volts
    - 200mV (for plug-in modules such as Digital Temperature adaptor)
    - 20V (0.01V resolution)
- Data hold available on all of the above (includes multimeter style probes).  
Size: 225(H) x 75(W) x 46(D)mm  
Cat. QM-1570

\$139.95



new for 88

## Signal Generator

This fully solid state product is capable of generating stable FR from 100kHz to 150MHz. It is designed as both a bench and portable instrument. It also features an internal 1kHz oscillator to modulate the RF carrier. External modulation to the RF output is provided as well.

The QT-2132 is supplied in a sturdy metal cabinet, with carrying handle and large easy to read scaled readout panel.

It is ideal for checking and aligning the front ends of AM, FM and TV sets.

#### SPECIFICATIONS

Frequency Range:	A 100kHz - 300kHz
	B 300kHz - 1000kHz
	C 1MHz - 3.2MHz
	D 3.0MHz - 10MHz
	E 10MHz - 35MHz
	F 32MHz - 150MHz

Up to 450MHz on 3rd harmonics

Frequency Accuracy:  $\pm 3\%$   
RF Output: 100mV rms, approx (up to 35MHz)  
Output Control: High-Low switch and fine adjuster  
Modulation: INT. 1kHz (AM) 30% approx.  
EXT. 50Hz - 20kHz, at less than 1V rms input

Audio Output: 1kHz, MIN. 1V rms (fixed)  
Crystal Oscillator: For 1 - 15MHz crystal in type HC-6u holder (not included)  
Power Requirements: AC 115/230V, 50/60Hz, approx 3VA

Dimensions: 150(H) x 250(W) x 130(D)mm  
Weight: Approx 2.5kg  
Cat. QT-2132

\$199

new for 88

## AC Millivoltmeter

The model QT-2320 is a sideband Millivolt Meter for measuring AC voltages from 0.3mV to 100V in 12 ranges with bandwidth of 8Hz to 1MHz. Each range shares 10 dB. The effective sensitivity at 0.3mV range is 30uV. This voltmeter is equipped with three colour scales for easy visual distinction, namely Volt, dB and dBm. The millivoltmeter also has a FET input with 10M ohm input impedance so circuit loading is negligible. Finally once again supplied in a sturdy metal case with carrying handle.

### SPECIFICATIONS

#### Voltage Range:

0.3, 1, 3, 10, 30, 100, 100V

#### dB Range:

0.3, 1, 3, 10, 30, 100V, in 12 ranges  
-70, -60, -50, -40, -30, -20, -10, 0, +10  
+20, +30, +40, dB (dBm - 1Vrms, 0dBm = 0.775V)

#### Accuracy:

±3% of full scale to 1kHz or 400Hz

#### Input Impedance:

10M ohm for each range. 40pF or less.

#### Bandwidth:

±5%, 10Hz - 500kHz

#### Amplifier Output:

1 Vrms at full scale 600 ohm impedance

#### Power Requirements:

AC 115/230V, 50/60Hz, Approx 5VA

Cat. QT-2320

**\$225**



## Colour Bar Pattern Generator

The QT-2325 is designed for repair or adjustment of Australian/New Zealand standard PAL system TV. The RF output covers Australia channel 3 and 4. This clever design uses a crystal controlled progressive scanning circuit and is portable.

### SPECIFICATIONS

#### RF Ranges:

PAL-B,D,G,H,I,K, System, VHF 55Hz - 63MHz, continuously adjustable; with 55.25MHz preset 10mVrms into 300 ohm load

#### RF Output Level:

300 ohm balanced

#### Synchronising Signals:

X'tal, vertical 50.036Hz, horizontal 15.611kHz

#### Sub-Carrier Frequency:

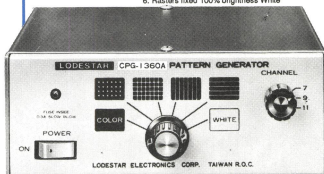
4.4336187MHz ±50Hz

#### Patterns:

1. Colour divided into upper and lower portions
- Upper half: Red, Blue, Green, Blue, Greenish-Yellow, White
- Lower half: Four Gray, Black
2. Dots 19(V) x 15(H) White
3. Crosshatch 19 x 15 square, White
4. Vertical lines 19 White
5. Horizontal lines 15 White
6. Rasters fixed 100% brightness White

Cat. QT-2325

**\$249**



## 150MHz Universal Digital Frequency Counter

Up to 8 digit resolution between 10Hz and 150MHz. It has many features amongst which is a memory hold switch which enables the counter to retain a measured frequency permanently on display until not needed. This is not a kit it is a fully built unit with a 3 month warranty. Can be upgraded to 500MHz by adding a prescaler.

### SPECIFICATIONS:

#### Frequency Range:

10Hz - 150MHz (max)

#### No of Digits:

8 LED display

#### Gate Time:

0.01s/0.1s/1s/10s

#### Input Sensitivity:

kHz range: 10Hz - 10MHz 50mVrms

MHz range: 1MHz - 150MHz 40mVrms

#### Resolution:

0.1Hz at 10 sec gate time

1Hz at 1 sec gate time

10Hz at 0.1 sec gate time

100Hz at 0.01 sec gate time

#### Response Time:

0.2 seconds

#### Time Base:

10.00MHz (crystal oscillator ±10ppm)

#### Power Supply:

6V DC battery or 9V DC 250mA adaptor

#### Impedance:

1M ohm

#### Attenuator:

x1 or x10

#### Reset:

Reset the counter to zero

#### Readout Units:

MHz, kHz

#### Hold:

Hold the last input signal

#### Dimensions:

250 x 170 x 70mm

BNC to 2 x alligator lead supplied

Includes 240V AC - 9V power supply

Cat. QT-2330

**\$199.50**



## Temperature Probe Adaptor for Digital Multimeters

This device simply plugs into the banana sockets of your digital multimeter. It will give an output of 1mV (millivolt) for every degree increase in temperature. This means that on, say, your 200mV DC range you can read the temperature on the multimeter directly. You can switch from °C to °F. A very high quality probe with semiconductor sensor in the tip. A generous curl cord connects the probe and adaptor housing. Requires 9V cell.

### SPECIFICATIONS:

#### Linear Voltage Output:

1mV/°C or 1mV/°F

#### Measurement Range:

-50°C to +150°C or -58°F to 302°F

#### Accuracy:

±0.5°C or ±1°F

#### Sensor:

Semiconductor type

#### Power:

006P 9V battery

#### Current Consumption:

2mA typical

#### Response Time:

From 23°C to 99.9°C 30 sec in stirring water

#### Battery Check:

"LOBAT" LED lights automatically when battery is exhausted

#### Dimension:

Probe: Ø5mm x L100mm

Adaptor: 38(W) x 70(L) x 39(H)mm

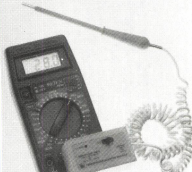
Wire: 3.5 metres retractable cord

120 grams

#### Weight:

Cat. QM-1590

**\$59.95**



Multimeter not included

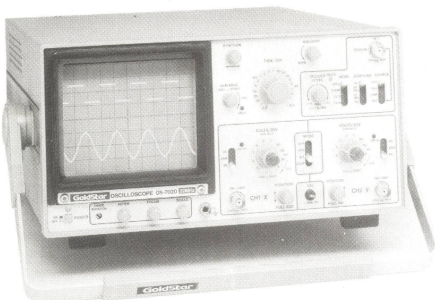
**MAIL ORDERS-INQUIRIES 02 747 1888**

Test Equipment

# 'Goldstar' Quality 20MHz Dual Trace Oscilloscope

At last, Jaycar is back in the 20MHz Dual Trace CRO business with a quality import from Korea.

This great oscilloscope features an extra large (6" diagonal) CRO tube, high accuracy and good sensitivity with illuminated scale graticule.



Cat. QC-1900

**\$899**

Probes to suit

Cat. QC-1902

\$49.50 each

**FEATURES** • Large 6" rectangular • High sensitivity 1mV/div • High accuracy  $\pm 3\%$  • Stable, low-drift design • 8 divisions of displayed dynamic range and accurate distortion-free waveform measurements • This instrument has a special TV sync, separation circuit for quick measurements of video signal • Convenient X-Y operation mode allows phase difference measurements between two waveforms

## SPECIFICATIONS:

### DISPLAY

CRT:

6 inch rectangular, internal graticule, scale illumination, photographic bezel

Effective Area:

8 x 10 div (1 div = 1cm)

Acceleration Potential:

2kV

External Intensity Modulation

### VERTICAL DEFLECTION

Sensitivity:

5mV/div to 5V/div in 10 calibrated steps  $\pm 3\%$   
1mV/div to 1V/div  $\pm 5\%$  when using x5 magnifier  
Uncalibrated continuous control between steps 1:1 to 2.5

Bandwidth:

DC to 20MHz ( $-3dB$ )  
DC to 7MHz ( $-30dB$ ) when using x5 magnifier

Rise Time:

Less than 17.5nsec

Max Input Voltage:

300V(DC+AC peak) or 500 Vp-p AC at 1kHz

Input Coupling:

AC, GND, DC

Input Impedance:

1M ohm, 20pF

Operating Modes:

CH1 (ADD), CH2 (INVERT), ALT, CHOP

X-Y Operation:

CH1: X-axis, CH2: Y-axis

### HORIZONTAL DEFLECTION

Sweep Time Range:

0.2 S/div to 0.2 S/div in 19 calibrated steps  $\pm 3\%$   
100NS  $\pm 5\%$  when using x10 magnifier (20NS and 50NS uncalibrated)  
Uncalibrated continuous control between steps 1:1 to 2.5

### TRIGGER

Modes:

Auto, Norm, TV-V, TV-H

Coupling:

AC, HF (Rej), LF (Rej), DC

Sources:

CH1, CH2, LINE, EXT

Sensitivity:

CH1 & CH2 0.5 div (20Hz - 2MHz); 1.5 div (2MHz - 20MHz)  
External 200mV (20Hz - 2MHz); 800mV (2MHz - 20MHz)

Slope:

+ or -

TV Sync:

Polarity: TV (-)

Calibrator:

1kHz, square wave, 0.5V  $\pm 3\%$

Power:

AC 100/120/220/240  $\pm 10\%$ , 50/60/400Hz, 35W

Dimensions:

290(W) x 145(H) x 375(D)mm

Weight:

7.5kg

Accessories:

Power cable, Fuse, Operation Manual

## Plastic Bodied Low Cost pH Meter Probe

As used in new Silicon Chip pH meter. This polypropylene bodied probe is a price breakthrough. The membrane protector is an integral part of the barrel. The QP-2230 has a 'spear' shaped membrane which allows easy and effective cleaning with a cotton bud.

### SPECIFICATIONS:

pH Range

0 - 14

Response

98% 20 secs

Temp

0 - 60°C

Cable

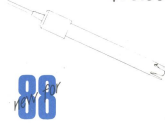
Coaxial 0.8 metre long

unterminated

Buffer solutions included.

Cat. QP-2230

**\$79.95**





## Economy Model Multimeter

- Ideal as a first meter. Compact enough to fit into the glove box in your car.
- 2,000 ohms/volt sensitivity
  - Mirror scale to prevent parallax error
  - Complete with test leads and instructions
  - DC & AC volts 0-10, 50, 250 & 1000V
  - -10 to +22dB
  - 0-100mA current
  - 0-1M ohm (2 ranges)
  - Measures 90 x 50 x 30mm
  - Battery included
  - Cat. QM-1002

**\$17.50**



## Medium Sensitivity Low Cost Multimeter

- 10,000 ohms/volt sensitivity
- Fuse and diode overload protection
- Total of 18 ranges
- Battery supplied 1 x AA cell
- Mirrored scale to minimise parallax errors
- 0.25, 2.5, 25, 250, 1000V DC
- 10, 50, 250, 1000V AC
- 0.1, 10, 500mA DC current
- 0-10M ohm in 3 ranges
- Safety off position to protect meter movement
- Size: 63 x 105 x 30
- Cat. QM-1015

**\$23.50**



## Logic Probe 3800A

### WITH MEMORY

The 3800A is versatile, pocket sized probe, compatible with TTL, DTL, HTL, CMOS and numerous other integrated circuits. It is an ideal tool for trouble shooting and analysis of digital circuits.

### FEATURES:

- Pulse memory making it suitable for use where memory function is required.
- Displays pulse presence to 20MHz, the intensity of the Pulse LED being directly proportional to the duty cycle of the signal observed
- The 3800A's circuitry does the work of a level-detector, pulse-detector and pulse-stretcher
- Hi LED indicates Logic "1", Low LED indicates "0"
- All pulse transitions (positive and negative) as narrow as 50 nano-seconds are stretched to 1/4 second and displayed on the Pulse LED
- One shot, low rep-rate narrow pulses which are nearly impossible to see even with a fast scope are easily detectable
- The 3800A's memory function allows for indefinite storage of single shot as well as low rep rates
- High quality, flexible power cord
- Input overload protection to +35V DC continuous. Reverse polarity protection is to +100V P-P
- Cat. QT-2210

**\$39.95**



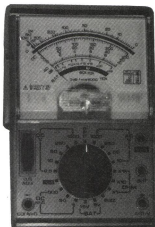
## Mini VOM Mutltester

Ideal multimeter for the hobbyist.

- 20,000 ohms/volt
- Continuity buzzer
- 23 ranges
- 1.5 and 9V battery tester
- Safety test leads
- Handle which doubles as tilting aid
- DC volts 2.5, 10, 50, 250, 1000
- AC volts 10, 50, 250, 1000
- DC current 5, 50, 500mA, 10A on separate jack
- Resistance R x 1, R x 10, R x 1k
- Decibels -8dB to +62dB on all AC ranges
- Size: 135 x 90 x 40
- Cat. QM-1022

**\$39.95**

new for 88



## Electronic FET VOM

The best analogue meter we could find is now available and it's under \$100!

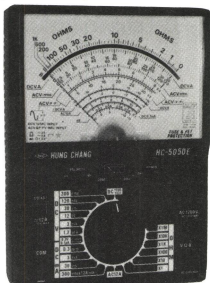
### LOOK AT THE FEATURES:

- Full electronic operation (FET)
- 12A DC & AC current ranges
- High input impedance
- Polarity reverse switch
- Safety test leads
- Zero ohms adjust
- Mirrored meter dial
- Tilt stand
- Fuse protected
- Working indicator

### SPECIFICATIONS:

- DC volts 0-3, 1-2, 12, 30, 120, 300, 1200
- Input impedance approx 10M ohms
- AC volts rms 0.3, 1.2, 30, 120, 300, 1200
- Peak-Peak 0-8.4, 33.84, 330, 840, 3300
- dB -10dB - +63dB at AC ranges
- DC current 0-0.1uA, 0.3, 3, 30, 300mA, 12A
- Potential drop 300mV
- AC current ranges 0-12A
- DC resistance R x 1, R x 10, R x 100, R x 1k R x 10k, R x 1M
- Size: 125 x 170 x 50mm
- Cat. QM-1050

**\$79.95**



**MAIL ORDERS-INQUIRIES 02 747 1888**

## 10 Amp Digital Multimeter + Transistor Tester + Capacitance Meter

A genuine low cost high performance combination multimeter/capacitance meter for the enthusiast! This unit has all of the most commonly used test gear rolled into one unit! Similar units are on the market but why pay around \$200 when you get the Jaycar direct import unit for much less.

### JUST LOOK AT THESE FEATURES

- 0.5" high digits
- High quality probes supplied
- LED and buzzer continuity test
- Precision thin film resistors for long term stability
- CMOS logic Y 1,000 - 2,000 hours battery life
- Meter protection fused
- Complete with battery and spare fuse
- Floating decimal point
- Auto polarity
- Vinyl carry case



**\$129**

Cat. QM-1540

#### SPECIFICATIONS

DC Volts	0.1mV - 1000V
AC Volts	0.1mV - 700V
DC Current	1uA - 10A (20A max 30 secs)
AC Current	1uA - 10A (20A max 30 secs)
Resistance	0.1 - 20M ohms
Capacitance	1pF - 20uF (2%)
Continuity	Less than 30 ohms @ 1mA
HFE Test	0 - 1000 10uA 2.8V
Diode Test	1mA (buzzer & LED)

## 4.5 Digit + Digital Hold + 10 Amp + Transistor Tester + Audible Continuity Tester

The Metex 4500H is ideal for the enthusiast/technician/engineer who needs the high resolution of a 4.5 digit meter. This meter is staggeringly accurate - see specs. Not only do you get an accurate meter, you also get digital hold as well. This enables you to take a reading and HOLD that reading on display even after you have removed the probes. Simply press the 'hold' button. It's great for working in dark or cramped areas. This feature is usually only found on very expensive multimeters!

The 4500H is supplied with vinyl case, a beautiful set of probes, convenient tilting bail, spare fuse, battery and instructions. It's a meter you will be proud to own!



**\$179**

Cat. QM-1550

HFE, diode tester, audible continuity test. Full overload protection.

#### SPECIFICATIONS

DC Voltage	Range	200mV, 2V, 20V, 200V, 1000V
	Resolution	10uV, 100uV, 1mV, 10mV, 100mV
	Accuracy	200mV-1000V $\pm 0.05\%$ rdg + 3 digits
AC Voltage	Input Imp.	10M ohms
	Range	200mV, 2V, 20V, 200V, 750V
	Resolution	10uV, 100uV, 1mV, 10mV, 100mV
DC Current	Accuracy	200mV - 200V $\pm 0.5\%$ rdg + 10 digits
	Input Imp.	750V $\pm 0.8\%$ rdg + 15 digits
	Range	10M ohms
AC Current	Resolution	200uA, 2mA, 20mA, 200mA, 2A, 10A
	Accuracy	10nA, 100nA, 1uA, 10uA, 100uA, 1mA
	Range	200uA - 20mA $\pm 0.3\%$ rdg + 3 digits
AC Current	Resolution	200mA - 2A $\pm 0.5\%$ rdg + 3 digits
	Accuracy	10A $\pm 1.0\%$ rdg + 5 digits (10A range unfused)
	Range	10A (20A up to 60 secs)
Resistance	Max I/P Amp	200uA, 2mA, 20mA, 200mA, 2A, 10A
	Range	10nA, 100nA, 1uA, 10uA, 100uA, 1mA
	Resolution	200uA - 20mA $\pm 0.8\%$ rdg + 10 digits
Resistance	Accuracy	200mA - 2A $\pm 1.0\%$ rdg + 10 digits
	Range	10A $\pm 1.5\%$ + 5 digits (10A range unfused)
	Max I/P Amp	10A (20A up to 60 secs)
Resistance	Range	200, 2k, 20k, 2M, 20M ohms
	Resolution	10m ohm, 100m ohm, 1, 10, 100, 1k ohms
	Accuracy	200 ohm $\pm 0.2\%$ rdg + 5 digits
Resistance	Range	2k ohm - 2M ohm $\pm 0.1\%$ rdg + 3 digits
	Resolution	20M ohm $\pm 0.5\%$ rdg + 5 digits
	Accuracy	200 ohm 250V DC/AC rms, 2k - 20M 500V DC/AC rms
Resistance	Range	200 ohm 250V DC/AC rms, 2k - 20M 500V DC/AC rms
	Resolution	200 ohm 250V DC/AC rms, 2k - 20M 500V DC/AC rms
	Accuracy	200 ohm 250V DC/AC rms, 2k - 20M 500V DC/AC rms

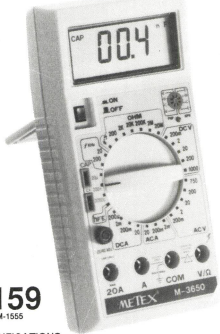
**SPRINGVALE-VIC 03 547 1022**

## Frequency Counter DMM + Capacitance Meter + Transistor Tester + 20 Amp Current + High Impact Case!



This compact DMM is housed in a bright yellow high impact plastic case. It features a frequency counter capability to 200kHz, transistor test, diode test, continuity (with buzzer), capacitance meter, up to 20 amp current measurement and comprehensive AC/DC voltage, current and resistance ranges. This meter would be excellent value at \$259, but at \$159 it is absolutely sensational.

(Note: Because the QM-1555 is supplied in a high impact case a vinyl carry case is not supplied).



**\$159**  
Cat. QM-1555

### SPECIFICATIONS

DC Voltage	Range Resolution 100uV, 1mV, 10mV, 100mV, 1V Accuracy 200mV - 1000V $\pm 0.3\%$ + 1 digit
AC Voltage	Range Resolution 100uV, 1mV, 10mV, 100mV, 1V Accuracy 200mV-200V $\pm 0.8\%$ rdg + 3 digits 750V $\pm 1.2\%$ rdg + 3 digits
DC Current	Input Imp. 10M ohm Range Resolution 100nA, 1nA, 10uA, 100uA, 10mA Accuracy 200uA-20mA $\pm 0.5\%$ rdg + 1 digit 200mA $\pm 1.2\%$ rdg + 3 digits 10A $\pm 2.0\%$ rdg + 5 digits - 10A range
unfused	
AC Current	Max I/P Amps Range Resolution 1uA, 10uA, 100uA, 10mA Accuracy 2mA-20mA $\pm 1.0\%$ rdg + 3 digits 200mA $\pm 1.8\%$ rdg + 3 digits 10A $\pm 3.0\%$ rdg + 7 digits - 10A range
unfused	
Resistance	Range Resolution 0.1, 1, 10, 100, 1k, 10k ohms Accuracy 200 ohm $\pm 0.5\%$ rdg + 3 digits 2k ohm - 2M ohm $\pm 0.5\%$ rdg + 1 digit 20M ohm $\pm 0.5\%$ rdg + 2 digits 200 ohm 250V DC AC rms, 2k - 20M
ohm 500V	Overload
Capacitance	Range Resolution 100pF, 1nF, 10nF Accuracy 200nF-uF $\pm 3.0\%$ + 5 digits 0 - 20kHz, 0 - 200kHz
Frequency/Range	
Full overload protection	

## 10 Amp Digital Multimeter with Transistor Test Facility

With the popularity of Digital Multimeters it was up to Jaycar to find one that had a 10A scale and did not cost an arm and a leg!

Jaycar has done it with this direct import unit with sensational specifications at an unheard of price!

### JUST LOOK AT THESE FEATURES

- 0.5" high digits
- High quality probe set supplied
- Vinyl carry case supplied
- Built-in tilting ball
- LED and buzzer continuity test
- Precision thin film resistors used for long term accuracy
- CMOS logic
- 1,000 - 2,000 hours battery life
- Single function range switch
- Complete with battery, spare fuse (2AG) and instruction manual
- Protected on/off switch
- Auto polarity
- Protected
- Floating decimal point



**\$89.95**  
Cat. QM-1530

### SPECIFICATIONS

DC Volt	0.1mV - 1000 volts
AC Volt	0.1mV - 700V
DC Current	1uA - 10A
AC Current	1uA - 10A
Resistance	0.1 - 20M ohm
Continuity	Less than 30 ohms @ 1mA
HFE Test	0 - 1000 10uA 2.8V NPN/PNP
Diode Test	1mA
Basic accuracy of volts, current and resistance is between 0.5 - 1.2% depending on range.	
Dimensions	170(H) x 90(W) x 35(D)mm

**MAIL ORDERS-INQUIRIES 02 747 1888**

## Multimeter Test Probes

Test probes to 4mm banana plugs (red and black).  
Cat. WT-5316

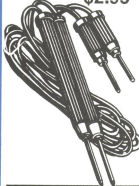
**\$2.95**



## Multimeter Test Probes

Test probes to 2mm multimeter pin plugs (red and black).  
Cat. WT-5315

**\$2.95**



## High Quality Multimeter Leads

Are you sick and tired of those old multimeter leads breaking all the time? Jaycar now stocks the same leads as supplied in our Metex range of quality multimeters.

- Supplied with heavy duty cable
- Right angle banana plugs with plastic sleeve
- Finger protectors built in the probes

Cat. WT-5318

**\$8.95 pr**

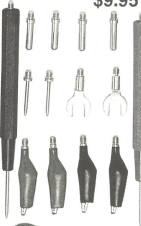


**88**  
now for

## 16 Piece Test Lead Set

Consists of 2 leads with screw sockets one each end and attachments screw in, 4 x alligator clips, 4 x 2mm pin tips, 4 x banana plugs, 2 x spade lugs. All colour coded red and black.  
Cat. WT-5218

**\$9.95**



## CRO Probe

Works with all CRO's with BNC input. One to one or ten to one attenuation switch.

Cat. OC-1902

**\$49.50**



## TURN YOUR SURPLUS STOCK INTO CASH!!

Jaycar will purchase your surplus stocks of components and equipment. We are continually on the lookout for sources of prime quality merchandise.  
CALL GARY JOHNSTON OR BRUCE ROUTLEY NOW ON (02) 747 2022

## Panel Meters Style MU45

Moving coil type. Overall size: 58(W) x 52(H)mm. Mounting hole centres 38 x 38mm. 44mm meter hole.

Nuts and washers supplied.

Cat. QP-5010 0-1mA 200 ohms resistance  
Cat. QP-5012 0-50uA 3,500 ohms

Cat. QP-5013 0-1A

Cat. QP-5014 0-5A

0.02 ohms resistance

Cat. QP-5020 0-20V

2,000 ohms resistance

Cat. QP-5022 0-30V

3,000 ohms resistance

Cat. QP-5030 "VU meter"

**\$16.95 each**

10 or more \$15.95 each



## Style MU52E

Moving coil type. Overall size: 80(W) x 66(H)mm. Mounting hole centres 64(W) x 48(H)mm. 50mm meter mounting hole. Nuts and washers supplied.

Cat. QP-5036

0-1mA 200 ohms resistance

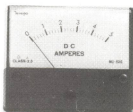
Cat. QP-5038

0-5A 0.02 ohm resistance

(Similar overall appearance to MU65)

**\$19.95 each**

10 or more \$18.95 each



## Style MU65

Moving coil type. Overall size: 100(W) x 82(H)mm. Mounting hole centres 80(W) x 64(H)mm. 63mm meter hole. Nuts and washers supplied.

Cat. QP-5040

0-1mA 200 ohms resistance

Cat. QP-5042

0-100uA 2,000 ohms resistance

**\$21.95 each**

10 or more \$20.95 each



## VU Meter

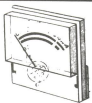
Brand new meter, as used in our 8002 mixer.

Overall size 48(W) x 45(H)mm. Meter size 44(W) x 25(H)mm.

Yellow background with "REC LEVEL" on meter.

Cat. QP-5058

**\$9.95**



## Centre Zero Tuning

As used in the RTTY decoder kit.  
Cat. QP-5054

**\$9.95 10+ \$9.50**



## Signal Strength

As used in the Microwave Oven Leak Detector kit.  
Cat. QP-5056

**\$9.95 10+ \$9.50**



## Edge Meter

Calibrated from 0 to 10.  
Cat. QP-5050

**\$9.95 10+ \$9.50**



**SPRINGVALE-VIC 03 547 1022**



## LASCAR DPMs

Lascar Electronics is the worlds most advanced manufacturer of quality surface mount technology (SMT) digital panel meters. Jaycar has represented Lascar since 1981 and in that time 10's of thousands of Lascar DPMs have been sold by us and are giving reliable service. Jaycar's OEM division can supply R&D and volume users at special prices. Contact Gary Johnston TODAY for full specs on the DPM's and for quantity prices. Call (02) 747 2022, telex AAJ2293, Fax 02 744 0767

### DPM400 3-5 Digit Display

This uniquely compact LCD DPM is ideally suited for low or high volume applications. The meter uses a 1/8 DIN standard snap-in bezel (48 x 24) for fast assembly. Auto zero, auto polarity, programmable decimal points and 200mV are standard features. On card pads make selection of operating mode a quick and convenient operation. At present this is the world's smallest off-the-shelf DPM.

- 10mm character height - Ultra low profile - Ultra compact - Annunciators
- Snap-in bezel - Can plug into a 28 pin IC socket - Surface mount technology

PANEL CUT OUT 45 x 22mm - 10mm CHARACTER HEIGHT  
Cat. QP-5502

**\$79.95 ea 10 or more  
\$75.00 each**



### DPM500 3-5 Digit Display

This meter features compatibility with the popular 7106, 26 & 36 range of A/D converters and as a single component can replace cumbersome LCD, A/D and numerous discrete components in existing applications. Auto zero, auto polarity, 200mV FSD, 12.5mm (1/2) digit height and programmable decimal points are standard. There are many engineering symbols and an output for auto ranging use. On card solder pads for hard wiring of operating mode make setting up quick & easy. - 12.5mm character - Ultra low profile - Ultra low power - Snap-in bezel - Can plug into a 40 pin IC socket

PANEL CUTOOUT 57 x 27mm - 12.5mm CHARACTER HEIGHT  
Cat. QP-5504

**\$85.00 ea 10 or more  
\$81.50 each**



### DPM2000 3-5 Digit Display

This meter features large character height and very high stability as well as a very large range of engineering symbols in the window. A negative rail generator IC - 7560 can easily be fitted to enable the DPM to run from single polarity supplies. Auto zero, auto polarity and programmable decimal points are standard.

- 15mm Characters - Ultra low power
- Many Annunciators - External bandgap reference - Single ended differential or ratiometric mode

PANEL CUTOOUT 68 x 33mm - 15mm CHARACTER HEIGHT  
Cat. QP-5506

**\$89.95 ea 10 or more  
\$85.00 each**



### \*DPM-200 Panel Meter

A low profile LCD DPM with a range of useful symbols. The DPM 200 features 15mm 3.5 digit display, and ultra low current consumption and a bandgap reference for high stability. It also features auto-zero, auto-polarity, 200mV f.s.d. It may be used in single-ended, differential or ratiometric modes. The f.s.d. can easily be changed by the user to indicate any other units. The decimal points and symbols can all be driven from an internal source. Wide supply rail (5-15V DC) with a variable threshold low battery warning indicator. Supplied with mounting clips and comprehensive data sheet.

- Ultra low power - Separately addressable annunciators - 15mm digits
- Bandgap reference

Cat. QP-5510 NOT RECOMMENDED FOR NEW OEM DESIGNS

**\$89.95 10 or more  
\$85.00 each**



\*Types denoted with an asterisk are not recommended for new designs but are still kept in stock for replacement purposes.

### DPM-40 3-5 Digit LED DPM

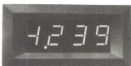
A compact low-cost LED DPM ideally suited for applications where a bright display under all conditions is required. The DPM 40 is fitted with High Efficiency 11mm LEDs and is supplied with a circularly polarised red filter and bezel giving a high contrast display. Auto zero, auto polarity, programmable decimal points and 200mV FSD are standard features. Easily programmed by user to read volts, current or other engineering units. May be used in single-ended or differential mode, or to measure floating inputs.

- Low cost - High brightness LEDs
- High contrast display - Single ended or differential inputs

Cat. QP-5542

PANEL CUTOOUT 68 x 33mm

**\$98.00 10+ \$92.50 ea**



### \*DPM-60 4.5 Digit LCD DPM

**SPECIFICATIONS**  
Accuracy 0.01%  $\pm$  1 digit Linearity  $\pm$  1 digit Samples/sec 16 Temp Stability 50ppm/°C typical Temp Range 0 - 50°C Supply Voltage 7.5 - 15V Supply Current 1mA typically Max DC Input Volts  $\pm$  20V CHARACTER HEIGHT 10mm

Cat. QP-5520

**\$169.00 10 or more  
\$164.00 each**

### \*DPM-600 3.5 Digit Bandgap Reference

• Second source the world's most common DPM! - OEM's please note! This is a 'second source' component specifically designed as a drop-in replacement.

It is an auto-zero, auto polarity, 200mV FSD unit with 1/2" (12.7mm) digit height. On card pads make operating selection mode easy. Sensitive adjustment of the DPM is easy with a 20 turn calibration pot fitted on the underside.

- Mounting bezel supplied - Ultra low power - Low cost second source to existing types - Easy to connect

PANEL CUTOOUT 62 x 32mm  
Cat. QP-5516

**\$89.95**



### \*DPM50 3-5 Digit LCD DPM

#### SPECIFICATIONS

Accuracy 0.1%  $\pm$  1 count Linearity  $\pm$  count Samples/sec 3 Temp Stability 50ppm/°C typical Temp Range 0 - 50°C Supply Voltage 5 - 15V DC Supply Current 200uA typical Max DC Input Volts  $\pm$  20V CHARACTER HEIGHT - 12.5mm  
Cat. QP-5513

**\$98.00  
10+ \$92.50 ea**



### \*DPM-125 3.5 Digit Ultra Compact

This DPM is designed to give maximum digit size in the smallest possible space. It is also exceptionally easy to use featuring on-card solder pads for easy operating mode selection and minimum number of connections. A snap-in bezel makes it easy to mount.

- 12.5mm digits - Ultra compact - Snap-in bezel - Ultra low power

PANEL CUTOOUT 45 x 22mm  
Cat. QP-5500

**\$75.00**



### \*C7224 4-5 Digit Universal

#### SPECIFICATIONS

Supply Voltage (5.5V abs max) 7.5 - 15V unregulated 5V DC regulated Typ Current Consumption 1mA Maximum Count 19999 Max Counting Rate 10MHz Typical (Schmitt Trigger) Count Input Level VTH 2.5V VTL 2V Min DC Input Level 0V Max DC Input Level 5V Op. Temp Range 0 - 50°C CHARACTER HEIGHT 10mm  
Cat. QP-5530

**\$129.00 10 or more  
\$124.00 ea**



MAIL ORDERS-INQUIRIES 02 747 1888

Digital Panel Meters

## Plug-Pack Battery Eliminators

Don't throw your money away on batteries when one of these compact plug packs can power your calculator, transistor radio or cassette recorder, etc.

**3, 4.5,  
6, 7.5,  
9, 12 V -  
300mA DC**

An extremely handy eliminator. Switchable output gives 6 different voltages. Terminates to a multiway connector.  
Cat. MP-3010  
Size: 47(W) x 50(H) x 43(D)mm



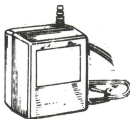
**\$18.50**

## 300mA DC Adaptors

If you only require one voltage you can save money by buying one of our new single voltage battery eliminators.

**6 VOLT 300mA**  
Cat. MP-3008  
**9 VOLT 300mA**  
Cat. MP-3007  
**12 VOLT 300mA**  
Cat. MP-3006

**\$14.95 ea**

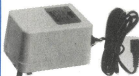


## 6/9/12 Volt 500mA DC

Enough power to supply virtually anything up to a good sized cassette. Terminates in a multiway connector that will mate with virtually any DC input socket.  
Cat. MP-3012

**\$19.95**

Size: 54(W) x 78(H) x 47(D)mm

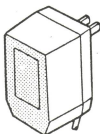


## 13.8V DC 800mA Power Pack

Specially designed for burglar alarm control panels that don't need more than 900mA current. For large alarm systems use MP-3018.

Cat. MP-3019  
Size: 65(W) x 84(H) x 53(D)mm

**\$28.50**



## 6/7.5/9/12 Volt 1 Amp DC

Overload protected high current model. Suits continuous use intercoms, high current cassette recorders, toys, etc. Screw terminations and mains cord and lead. Weight 60 grams.  
Cat. MP-3016

**\$29.95**



## 12V DC 2 Amp Regulated Power Pack

Ideal for CB and workshop use where large amounts of power are required. DC connection via banana plug or screw terminals.  
Cat. MP-3017

Size: 85(W) x 70(H) x 145(D)mm

**\$74.50**



## Non Regulated 13.8V 2 Amp Power Supply

Especially designed for House Alarms. It will power the alarm as well as charge the standby Gel battery. It will also power car radio/stereo and CB radios off the mains.  
Cat. MP-3019

Size: 85(W) x 70(H) x 145(D)mm

**\$52.50**



## 12V AC 300mA Plug Pack

Ideal outboard supply for small projects. Eliminates hum problems caused by internal transformers - also much safer. As used in many magazine projects. Double insulated. Powers our AV-6501 Enhancer.  
Cat. MP-3020

Size: 50(W) x 70(H) x 45(D)mm

**\$13.95**



## 16V AC 1.5 Amp Power Supply

Designed for use with many house alarm panels, like our LA-5162 and LA-5168.

Supplied with three metres of cable for connection to alarm.  
Cat. MP-3021  
Size: 55(W) x 90(H) x 60(D)mm

**\$29.50**



## Car Converter 12V - 6/7.5/9V @ 800mA

Plugs into a cigarette lighter socket to provide power to your portable radio or cassette. Multiway output suits most sockets.  
Cat. MP-3014

**\$16.50**



## 240-115V 125VA Stepdown Transformer

Ferguson brand. Wire straight into screw terminals provided. 240 volts in one side and 115 volts out the other. For safety we recommend you mount it in an enclosure. Will deliver up to 1.08 amps, 125 watts into a resistive load.  
Cat. MF-1092

Size: 96(W) x 80(H) x 75(D)mm

**\$76.50**



## 600/600 Ohm Transformer

Specially designed for connecting electronic circuits to Telecom lines. High dielectric insulation. PCB mounting, will handle quite substantial signals without saturation. Telecom approved.  
Cat. MA-1510

Size: 36(W) x 36(H) x 36(D)mm

**\$19.95**

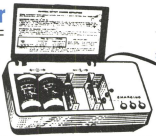


## Universal NiCad Battery Charger

### FEATURES:

- \* Operates from 240V mains
- \* Accepts AA, C, D & 9V NiCads
- \* Charges singly or in groups
- \* Charge different size batteries together
- \* Charging indicator lamp at each battery position
- \* Incorporates battery test facility
- Cat. MB-3504
- Size: 172(W) x 52(H) x 140(D)mm

**\$32.50**



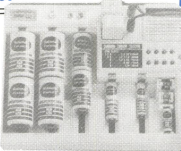
## Multi Function NiCad Charger

This one does everything!

### FEATURES

- \* Charges 8 - AAA, AA, C or D cells at once
- \* Charges 3 to 9 volt cells via universal connector
- \* Charges 3, 6 and 12 volt Gel batteries
- \* Charges button cells
- \* Test meter and LED charging
- \* 240 volt operated
- Cat. MB-3508
- Size: 245(W) x 65(H) x 185(D)mm

**\$49.95**



## Gel Battery Charger

This handy charger will recharge your Gel batteries. Delivers 300mA current at 12 volts DC. Supplied with quick connect lugs for easy connection to the battery.  
Cat. MP-3506

**\$14.95**



## Solar Battery Charger

The solar panel in the lid will charge up to 4 x AA NiCads in a fairly short time. It is ideal for yachts, campers or anywhere where 240V is not available. It is NO DEARER than an ORDINARY NiCad charger but takes about the same time to charge in Reasonable sunlight.  
Cat. MB-3502

Size: 65(W) x 30(H) x 95(D)mm

**\$17.95**

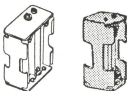
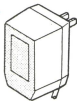


## Low Cost NiCad Charger

### Charges 4AA, 8AA and 9V NiCads

Supplied with 4 and 8 way AA battery holders and 9V snap. 3 way switch allows 3 different charging rates: 6V @ 45mA, 12V @ 45mA and 9V @ 15mA.  
Cat. MB-3510

**\$17.95**



## 12.6V CT @ 150mA

As used in many, many kits. 240V primary.

Cat. MM-2006

Size: 40(W) x 38(H) x 28(D)mm

**\$5.95 ea**

10 up \$5.50 ea



## 6-15 Volt 1 Amp

This little beauty suits a multitude of projects with its wide range of voltages. This one is fully approved by the A.E.E. (unlike many similar models). Voltage taps are at 6.3, 7.5, 8.5, 9.5, 12.6, & 15V.

(2155 type) 240V primary.

Cat. MM-2002

Size: 60(W) x 50(H) x 50(D)mm

**\$10.95 ea**

10 up \$10.25 ea



## 6-15 Volt 2 Amp

Voltage taps are 6, 9, 12 & 15 volts. Higher current for those bigger jobs.

(2156 type) 240V primary.

Cat. MM-2004

Size: 68(W) x 54(H) x 70(D)mm

**\$16.95 ea**

10 up \$15.95 ea



## 15-30 Volt 1 Amp

Similar to the MM-2002 but with higher voltage taps. Also fully approved. Taps at 15, 17.5, 20, 24, 27.5 & 30 volts. (6672 type) 240V primary.

Cat. MM-2008

Size: 68(W) x 58(H) x 58(D)mm

**\$16.95 ea**

10 up \$15.95 ea



## Low Cost Multipurpose Power Transformer

240V to 9, 12, 15, 18, 21, 24 volts at 60VA (60W). High grade silicon steel laminations. Made right here in Australia. Use of high grade silicon steel has enabled surprisingly compact dimensions. 240V primary.

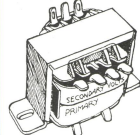
Volts	Current	C/T
3	6.6A	No
6	6.6A	Yes
9	6.6A	No
12	5A	No
15	4A	No
18	3.3A	Yes
21	2.9A	No
24	2.5A	Yes

Cat. MM-2005

Size: 70(W) x 58(H) x 70(D)mm.

**\$26.50 ea**

10 up \$25.50 ea



## 18 Volt 6 Amp High Current

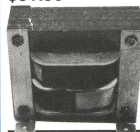


This heavy duty transformer is ideal for CB and Amateur computer power supplies and battery charger use. Fly lead terminations. 240V primary.

Cat. MM-2000

Size: 95(W) x 84(H) x 75(D)mm

**\$31.95**



## 22/0/22 Volt 1.5 Amp

As used in the Playmaster Twin 25 amplifier. Suits many similar amps. 240V primary.

Cat. MM-2010

Size: 80(W) x 65(H) x 65(D)mm

**\$22.50**



88 NEW FOR

**GORE HILL 439 4799**

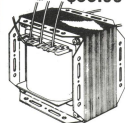
Battery Chargers/Transformers

## 35/0/35V 2.5 Amp



4361 type as used in the  
Playmaster MOSFET and ETI 5000  
amps. This is the transformer  
recommended by EA for this  
project. With copper strap to  
reduce hum dramatically.  
Size 95 x 79 x 95mm. 240V primary.  
Cat. MM-2015

**\$55.00**



## 47/0/47 Volt 3 Amp

4363 type designed for really high  
power use. Used in both the EA  
and ETI 300 watt modules.  
Has 2 x 15V @ 500mA  
windings to power preamps etc.  
240V primary  
Cat. MM-2017

Size: 110(W) x 85(H) x 95(D)mm

**\$69.00**



## 28/0/28 Volt 2 Amp

Standard E core model. Ideal for  
power amplifiers. As used in the  
ETI 480 power amplifier kits.  
240V primary.  
Cat. MF-1095

**\$31.95**

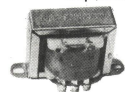
## Speaker Line Transformer

For use with 70V or 100V speaker  
lines (in outdoor PA's etc). Primary  
2.5/5k, secondary 2, 4, 8 & 16 ohm.  
4 watts rms power rating.  
Cat. MM-2001

Size: 43(W) x 35(H) x 35(D)mm

**\$6.95**

10 up **\$6.50 ea**



## Strobe Trigger

As used in the ETI Strobe kit or for  
general hobbyist projects.  
Cat. MM-2520

Size: 10mm x 7mm dia. **\$1.95**



## Miniature Transformers

### OUTPUT

- Primary/secondary 500 ohms
- Iron core
- Size 15 x 11 x 14(D)mm
- 450mW rating
- Cat. MM-2530

**\$1.95 ea**

10 up **\$1.85 ea**

### OUTPUT

- Primary/secondary 1k ohms
- Ferrite core
- Size 15 x 14 x 11(H)mm
- 350mW rating
- Cat. MM-2532

**\$1.50 ea**

10 up **\$1.35 ea**

### COUPLING

- 30/3k
- Iron core
- Size 16 x 15 x 15(D)mm
- Cat. MM-2534

**\$1.50 ea**

10 up **\$1.35 ea**



## Low Cost Line Input Transformer

Max input level +120dBm.  
Ideal input coupling transformer enables  
DC isolation of various modules  
thereby preventing hum pick-up etc.  
Wide frequency response:  
20Hz to 30kHz  
Nominal impedance ratio  
10k:10k 1:1  
Ideal for coupling from 600 ohm lines to  
amplifier input stages etc.  
Cat. MT-4705

Size: 32 x 30 x 27(D)mm

**\$7.50 ea**

10 up **\$6.90 ea**



## 20 Watt Line

Primary power taps (100V line)  
1.25/2.5/5/10/15/20W (halve these for  
70V lines).

Secondary taps 4/8/16 ohms

Cat. MM-2003

Size: 59(W) x 50(H) x 45(D)mm

**\$17.95**



## C-Core - used in amplifier 60/60 - JT353



This is a superb piece of engineering.  
Basically it is a dual diagonally wound  
power transformer. This winding  
technique greatly reduces stray hum  
fields - similar to a toroid. The  
advantage is that slightly more power  
can be extracted from the same space  
than a toroid of similar ratings would  
occupy. Supplied with mounting  
bracket.

Primary 240V

Secondary 30-0-35V @ 2A

15-0-15V @ 0.25A

Cat. MM-2020

Size: 95(W) x 76(H) x 95(D)mm

**\$79.50**

## Balanced Microphone Transformer

Mu-metal shielded can, bush mounting.  
200 ohm ct primary/secondary. 10k ohm  
primary/secondary. Can be used either  
way round. Used for PA mics, disco's  
etc., where low hum mic input is  
needed.

Cat. MT-4710

Size: 30(H) x 15mm dia.

**\$20.95**

## Bridging/ Isolating Transformer

Mu-metal shielded can. Used for  
coupling audio modules - prevents earth  
loops, hum, etc. Essential coupling  
device where DC isolation is required.  
Nominal impedance ratio 10k:10k  
(1:1).

Cat. MT-4720

Size: 30(H) x 15mm dia.

**\$20.95**



## PC Mount 5VA

### A series of ultra-compact

PC mount transformers.  
These are used in many popular  
projects. A range of voltage with  
corresponding current. All have two  
secondary windings which can be  
used to provide 2 supplies or  
connected in series to double the  
voltage, or parallel to double the  
current.

240V primary

Cat. MF-1000 2 x 4.5V @ 1.11A

Cat. MF-1002 2 x 6V @ 830mA

Cat. MF-1004 2 x 7.5V @ 670mA

Cat. MF-1006 2 x 9V @ 560mA

Cat. MF-1009 2 x 12V @ 420mA

Cat. MF-1012 2 x 15V @ 330mA

Cat. MF-1015 2 x 20V @ 250mA

Size: 55(W) x 35(H) x 40(D)mm

**\$19.95 ea**



## PL20VA Flat Pack

These are low profile transformers  
suitable for many projects. Twin  
secondary gives maximum flexibility.  
Lower hum radiation than  
conventional types. 240V primary.

Cat. MF-1030 PL12/20VA

2 x 6V @ 1.67A

Cat. MF-1033 PL15/20VA

2 x 7.5V @ 1.33A

Cat. MF-1036 PL18/20VA

2 x 9V @ 1.11A

Cat. MF-1039 PL24/20VA

2 x 12V @ 830mA

Cat. MF-1042 PL30/20VA

2 x 15V @ 670mA

Cat. MF-1045 PL40/20VA

2 x 20V @ 500mA

Size: 85(W) x 40(H) x 60(D)mm

**\$27.95 ea**



## PL60VA

Higher profile. Low hum radiation and  
twin secondaries. 240V primary.

Cat. MF-1072 PL15/60VA

15V @ 4A

1 winding only

Cat. MF-1075 PL18/60VA

2 x 9V @ 3.33A

Cat. MF-1078 PL24/60VA

2 x 12V @ 2.5A

Cat. MF-1081 PL30/60VA

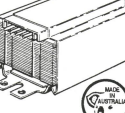
2 x 15V @ 2A

Cat. MF-1082 PL40/60VA

2 x 20V @ 1.5A

Size: 85(W) x 53(H) x 60(D)mm

**\$41.95 ea**





## Toroidals

### WHY A TOROID?

- Smaller size and weight to meet modern 'airline' requirements
- Low electrically induced noise demanded by compact equipment
- High efficiency enabling conservative rating whilst maintaining size advantages
- Simple, quick, single bolt mounting

The Toroidal transformer is now accepted as the standard in the industry, overcoming the obsolete laminated type. Industry has been quick to recognise the advantage toroidals offer in size, weight and lower radiated field. Current ratings on toroidal transformers.

Can be used in 2 ways:-

- A) both secondary windings in series - higher volts  
B) both secondary windings in parallel - higher amps

#### 160VA toroids

Cat. MT-2112	12V	6.66	13.30 amps
Cat. MT-2113	18V	4.44	8.88
Cat. MT-2114	25V	3.2	6.4
Cat. MT-2115	30V	2.66	5.33
Cat. MT-2116	35V	2.28	4.57
Cat. MT-2117	40V	2.0	4.0
Cat. MT-2119	45V	1.77	3.55

Size: 110 O/D x 50 I/D x 40(H)mm

**\$65.00 each**

MT-2148 95 + 35 @ 2.3A, 15 + 15 @ 250mA

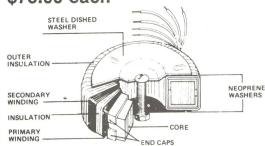
**\$67.50**

#### 300VA toroids

		Mode A	Mode B
Cat. MT-2130	12V	12.5	25.0
Cat. MT-2132	18V	8.33	16.66
Cat. MT-2134	25V	6.0	12.0
Cat. MT-2136	30V	5.0	10.0
Cat. MT-2138	35V	4.28	8.57
Cat. MT-2140	40V	3.75	7.5
Cat. MT-2142	45V	3.33	6.66

Size: 125 O/D x 54 I/D x 55(H)mm

**\$75.00 each**



### Toroidals to suit AEM 6000 Power Amplifier

50-0-50V 300VA Size: 125 O/D x 54 I/D x 55(H)mm <b>\$79.95</b>	30-0-30V 80VA Cat. MT-2191 Size: 110 O/D x 50 I/D x 30(H)mm <b>\$49.95</b>
---	--

## IEC-Type Mains Input Filter

This high quality filter is basically a metal box with colored on lid. On one side is an IEC-320 type recessed chassis plug. The box mounts on the inside of a cabinet with an appropriate hole for the IEC connector and two mounting screws. The filter is rated at 240V 3 amps 1/4" C.T.C. type terminals are on the top for simple internal mains connection.

**SPEC'S**  
Input 115-250V AC  
47 - 63Hz  
3 amp (continuous)  
65(D) x 45(H)  
excluding terminals  
x 53(W)mm

Very high quality.  
Cat. MS-4004

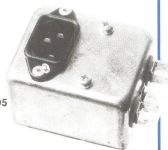
**\$19.95 ea 10 up \$17.95**

(OEM's check us for bulk prices)

**8 amp version Cat. MS-4005**

**\$29.95** (not illustrated)

MADE IN THE USA



## Squeaky Clean Mains Filters

PROTECTION FOR: MICROPROCESSORS, TERMINALS, MICRO COMPUTERS, PRINTERS, DISK DRIVES AND TELEMETRY EQUIPMENT

Used by Government Departments, Schools, Universities, Banks

### and TV Stations

Most modern personal computers and peripheral equipment are fitted with basic type filtering components. In most instances this protection offers only minimal protection and is not capable of handling many mains supply problems.

The problems facing the personal computer user includes high levels of RF (radio frequency) interference, voltage spikes and FM modulation.

The supply authority actually superimposes a range of frequencies from 10kHz to over many MHz for the control of hot water systems, and other industrial remote control services. Additionally both industrial and domestic motors turning on and off can induce large spikes into the mains supply.

For you to ensure maximum safeguard to both your hardware and software against RF noise, control tones and voltage spikes the equipment should be pre-filtered by a SQUEEKY CLEAN MAINS FILTER.

Many unexplained errors, programme corruption and general inconvenience are eliminated by a Squeaky Clean.

#### SPECIFICATIONS:

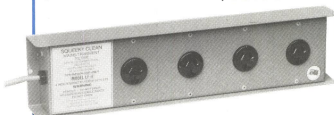
Approval No's:	N10716/N10717
Load Rating:	Cont 10 amps, with circuit breaker at 240VAC
Clamping Voltage:	990V peak or 275V rms
Peak Impulse Current:	2000A (8 x 12u); 2 outlet (8 x 20u)
Protection Modes:	Active-Neutral
Earth Leakage:	Will not trip a 20mA Earth Leakage breaker
Cable Length:	1 metre (approx)

4 OUTLET Cat. MS-4020

**\$269.00**

2 OUTLET Cat. MS-4025

**\$99.00**



88



## Economical Mains Filter

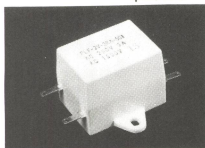
250V AC @ 3A

Insulation loss line to line 20dB 0.8 - 30MHz. Line to ground 30dB 0.7 - 30MHz. Ideal for computers, amps, etc. Quick connect lugs. D.O.T. approved.

Cat. MS-4002

Size: 35(W) x 28(H) x 27(D)mm

**\$26.50**



MAIL ORDERS-INQUIRIES 02 747 1888

## TO-220 Mini

This little heatsink is great for voltage regulators and flat pack transistors. Its small size ensures it will fit into the tightest places. Size: 20(L) x 13(W)mm with fins 9mm high. Cat. HH-8502



**85¢**  
10 up  
75¢ ea

## TO-220 Heatsink

A larger version of HH-8502. Ensures maximum dissipation where the mini TO-220 will not suffice. Size: 30(L) x 25(W)mm with fins 13mm high. Cat. HH-8504



**\$1.50**  
10 up  
\$1.35 ea

## TO-18 Round Fan Type

High efficiency, feather weight press-on for maximum dissipation. Total diameter 16mm x 10mm high. Cat. HH-8505



**65¢**  
10 up  
59¢ ea

## TO-5 Round Fan Type

As TO-18 but suits TO-5 transistors. Total diameter 19mm x 5mm high. Cat. HH-8512



**55¢**  
10 up  
45¢ ea

## TO-220 Clip-on

The heatsink will just clip over a device when required for permanent or temporary installation. Cat. HH-8503



**\$1.20**  
10 up  
\$1.10 ea

## TO-220 Medium

A medium version for all flat pack devices. Measures 27mm x 25mm base and 34mm high. Used extensively on PC boards. Vertical flutes for maximum thermal efficiency. Cat. HH-8508



**\$1.00**  
10 up  
90¢ ea

## IC Heatsink

Very handy heatsink if you have an overheating IC. Measures 18.5mm long x 6mm wide x 5mm high. Heatsink has 7 fins. Cat. HH-8506



**95¢**  
10 up  
80¢ ea

## Universal "U" - Type

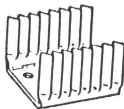
Universal hole pattern allows mounting of nearly every power transistor, as well as flat packs. Ideal for PCB mounting. 60mm long x 35mm wide with fins 30mm high. Cat. HH-8511

**\$1.50**  
10 up  
\$1.30 ea



## TO-3 Special

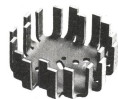
We have made a bulk purchase of TO-3 minifin heatsinks. Size 36mm x 38mm base x 26mm high. Cat. HH-8509



OEM's  
**ASK FOR OUR GREAT QUANTITY PRICES**  
**\$1.95**  
10 up  
\$1.75 ea

## TO-3 Minifin

This heatsink gives incredible heat dissipation due to its unique fin design. It measures 50mm x 50mm by 25mm high. Drilled to suit TO-3 case. Cat. HH-8510



**\$2.25**  
10 up  
\$2.05 ea

## Universal TO-3 Transistor Mounting Bracket

Mounts 4 x TO-3 devices on pre-punched heavy duty right angle bracket. Hole pattern conforms to most popular PCB designs for amp kits. 152mm long x 40mm wide turned corner 12mm long. Cat. HH-8500



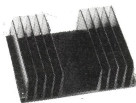
**\$2.50**

## Versatile Heavy Duty

Extrusion is tapped and supplied with mounting screws. Allows horizontal and vertical mounting. Heatsink has tongue and grooved ends enabling "ganging" of heatsinks together. Size 110(W) x 33(H) x 78(D)mm

UNDRIILLED  
**\$5.50**  
10 up \$5.15 each  
Cat. HH-8566

DRILLED 2 x TO-3  
**\$6.75**  
10 up \$6.50 each  
Cat. HH-8567



## Economy Power

This unit has fins on both top and bottom. Available in both drilled and undrilled types. Accepts two of each type transistors TO-3, TO-126 and TO-220.

UNDRIILLED  
**\$4.50**  
10 up \$4.10 each  
Cat. HH-8560

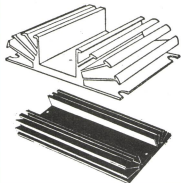
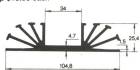
DRILLED 2 x TO-3  
**\$4.95**  
10 up \$4.50 each  
Cat. HH-8561



## High Efficiency Fan Type

Due to its thick base and fan type fins these heatsinks can dissipate massive amounts of heat.  
Available in various lengths, 105mm wide

- Cat. HH-8570  
35mm long  
10 up \$3.65 each **\$3.95**
- Cat. HH-8572  
75mm long  
10 up \$5.20 each **\$5.50**
- Cat. HH-8574  
225mm long  
10 up \$14.25 each **\$14.95**
- Cat. HH-8578  
300mm long  
10 up \$15.95 each **\$16.95**



## Super Heavy Duty

This is a black anodised heatsink section which is flined on one side and flat on the other. The extrusion cross section is 125mm wide and 36mm high. Unique recessed channels are incorporated into the flat side to accommodate screws, panels, heatsink brackets, etc.

### AVAILABLE IN THREE LENGTHS

- Cat. HH-8590  
125(W) x 75(L)mm **\$ 7.95**
- Vertical 2 unit rack  
Cat. HH-8592  
125(W) x 125(L)mm **\$11.95**
- Vertical 3 unit rack  
Cat. HH-8594  
125(W) x 250(L)mm **\$20.95**

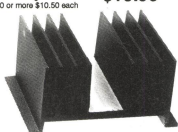


## Die Cast

Jaycar is proud to announce a range of Made in Australia diecast heatsinks. They are gravity cast in aluminium, have the area where semiconductors mount, milled flat and are finally finished in powdercoat black. They are low cost for the performance offered  
SIZE 134mmx 65mm (height) x length (see below)

### 8FNF SERIES

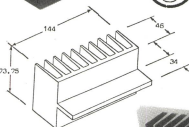
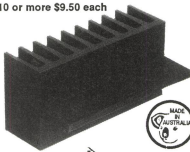
- Cat. HH-8540  
50mm long  
10 or more \$4.65 each **\$4.95**
- Cat. HH-8541  
75mm long  
10 or more \$7.00 each **\$7.50**
- Cat. HH-8542  
100mm long  
10 or more \$9.00 each **\$9.50**
- Cat. HH-8543  
150mm long  
10 or more \$10.50 each **\$10.95**



### MF10-2F-75

74(H) x 144(L) x 46(W)mm (Bracket 34mm wide)  
Cat. HH-8546

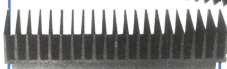
- \$9.95 ea**  
10 or more \$9.50 each



### MF-21-2F-75

Long diecast featuring large H/S surface area in a low profile package.  
Dimensions: 300(W) x 75(H) x 80(D)mm  
Cat. HH-8548

- \$19.95 ea**  
10 up \$17.95 each



### MF-14-2F-75

Similar to MF-21 but with deeper fins and not as long. Excellent for power amp 'bricks'.  
Size: 195(L) x 66(H)mm + bracket 34 x 76mm fin width  
Cat. HH-8550

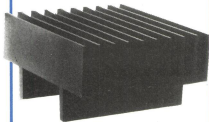
- \$19.95 ea**  
10 up \$16.95 each



### MF-14-2F-150

Double decker version of HH-8550. Enables you to mount 2 amplifier circuit boards on top of each other. Only occupies 8" of height.  
Size: 196(L) x 66(H)mm + bracket 34 x 150mm Fin width.  
Cat. HH-8552

- \$32.95 ea**  
10 up \$29.95 each



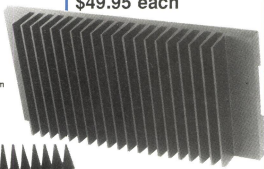
## Heatsink Front Panel



As used in the AEM6000 power amp. It can also be used as the sides of a 4 unit rack case for high-power rack mount PA amp! Die cast.

Total length 352mm - height 166mm  
Total depth 61mm - No of fins 20  
Cat. HH-8520

- \$49.95 each**



## Deluxe Rack Cabinets

**NOW YOUR PREAMPS, AMPS, CONTROL MODULES, MONITOR PANELS etc., CAN LOOK EVERY BIT AS GOOD AS TECHNICS, NAKAMICHI AND OTHER TOP MANUFACTURERS**

These beautifully crafted rack cabinets will give your equipment a real 1st class appearance. All aluminium construction. Removable top and bottom panels. Natural or black finish. All dimensions conform to the international standard. Ventilated lid. Deluxe brush finish anodised front panel. Individually cartoned. Supplied in flat pack form and easily assembled in a few minutes.

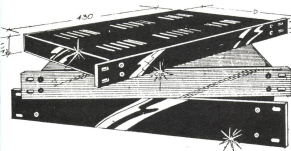
SIDE ELEVATION: D = 254mm; C (internal chassis height); B (mounting bolt centres).

Finish	A	B	C	Each	+5
Cat. HB-5411 Natural	44	34	38	\$65.00	\$62.00
Cat. HB-5413 Natural	88	57	82	\$75.00	\$71.00
Cat. HB-5415 Natural	132	89	126	\$90.00	\$85.00
Cat. HB-5410 Black	44	34	38	\$65.00	\$62.00
Cat. HB-5412 Black	88	57	82	\$85.00	\$80.00
Cat. HB-5414 Black	132	89	126	\$95.00	\$90.00

Beware of other rack cabinets that do not conform to International Rack sizing.

## SIX NATURAL AND BLACK FINISH MODELS

The black or natural finish cabinets are available in 44mm, 88mm or 132mm high modules. Mounting hole centres conform exactly to International Rack Specifications both vertically and horizontally.



## Blank Rack Panels

Of the same high quality as our International Rack series.

NATURAL FINISH		BLACK FINISH	
Cat. HB-5431 44mm	\$ 9.95	Cat. HB-5430 44mm	\$11.50
10+ \$9.00		10+ \$11.00	
Cat. HB-5433 88mm	\$16.95	Cat. HB-5432 88mm	\$19.95
10+ \$16.00		10+ \$18.95	
Cat. HB-5435 132mm	\$20.95	Cat. HB-5434 132mm	\$26.50
10+ \$19.95		10+ \$27.50	

## Economy Rack Cabinet

- Solid steel construction
- Black anodised front panel
- 3 unit (132mm)
- Conforms to International standards
- Ventilated top and side panels
- Cat. HB-5402

**\$72.50**



## Rack Frames

**FANTASTIC RACKING SYSTEM AVAILABLE IN 2 FORMATS**

(1) **RACKING FRAME ONLY** Fantastic for neatly housing your home Hi Fi system. Looks fine as is with your various sound system modules bolted in place, however, should the little woman disagree, then it is dead simple to obtain some low cost timber panels from your local cabinet shop to fill the side and top recesses. Edging of the timber is not required due to the 15mm recesses.

(2) **COMPLETE EQUIPMENT CABINET** With the simple addition of the panel sets you now have a series of professional equipment cabinets of appearance and ruggedness second to none - and just look at the savings!

**ASSEMBLY** Each Frame System is supplied complete with 12 custom extruded pieces, 6 clip-in M6 captive nuts and 6 M6 mounting screws. The sections and corner pieces simply push-fit together. A rubber or wooden mallet is recommended to fit it all together, they are self aligning pieces. Further strength can be obtained by pop riveting the various overlapping extruded sections if desired, although we hardly feel this is necessary.

**SIDE AND TOP PANELS** Tough powder coat medium grey gives a pleasing contrast with natural anodised frame. The resultant product is extremely professional in appearance and well and truly strong enough for the heaviest of electronic equipment.

**SUPPLIED IN FLAT PACK FORMAT**

**EASILY ASSEMBLED IN MINUTES**

**RACK FRAME SET 6 UNIT (370mm)**

Cat. HR-5210 **\$109.50**

**PANEL SET FOR 6 UNIT**

Cat. HR-5215 **\$ 49.00**

**RACK FRAME SET 18 UNIT (907mm)**

Cat. HR-5220 **\$139.50**

**PANEL SET FOR 18 UNIT**

Cat. HR-5225 **\$ 89.00**

**RACK FRAME SET 30 UNIT (1450mm)**

Cat. HR-5230 **\$169.50**

**PANEL SET FOR 30 UNIT**

Cat. HR-5235 **\$129.00**

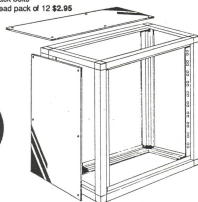
**SCREWS AND CAPTIVE NUTS TO SUIT**

Cat. HP-0645 16mm bolts pack of 12 \$2.95

Cat. HP-0640 Captive nuts pack of 12 \$4.95

Cat. HP-0645 16mm black bolts

Philips head pack of 12 \$2.95



## High Energy Rack Case

The use of Super Heavy Duty Heatlinks as rack case sides now allows a myriad of amplifiers, power supplies, battery chargers, etc., to be built in an "Off the Shelf" rack case.

**FANTASTIC FOR STEREO AMPLIFIERS**

Using heatlinks will accommodate an audio output stage of approximately 120W with normal efficiency and dissipation. A great chassis for heavy duty power supplies and battery chargers. Allows the simple fitting of computer type fans to inside back of rear panel, adjacent to each respective heatsink.

**SPECIFICATIONS**

**Front Panel**

3 unit rack size 480 x 132 x 3mm

**Rear Panel**

1.6mm aluminium

**Base/Top**

1mm steel, ventilation slots provided

**Internal Dimensions**

125 x 370mm x 250mm

**External Dimensions**

130 x 440 x 250mm plus standard front panel

**Finish**

Black anodised aluminium plus powdercoat top and bottom

Cat. HB-5400

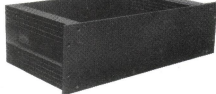


**ONLY**

**\$129.50**

4 or more

**\$122.50 each**

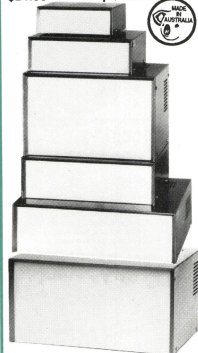




## Instrument Cases

Excellent range of cases made in Australia from heavy gauge aluminium and blue hammer finish steel. Ideal general purpose case at a reasonable price.

Cat. HB-5459	150(D) x 55(H) x 100(W)
<b>\$10.50</b>	<b>10 up \$10.00 ea</b>
Cat. HB-5460	200(D) x 80(H) x 130(W)
<b>\$12.95</b>	<b>10 up \$12.50 ea</b>
Cat. HB-5462	255(D) x 77(H) x 155(W)
<b>\$16.95</b>	<b>10 up \$15.95 ea</b>
Cat. HB-5464	255(D) x 153(H) x 155(W)
<b>\$21.95</b>	<b>10 up \$20.50 ea</b>
Cat. HB-5466	305(D) x 90(H) x 200(W)
<b>\$21.95</b>	<b>10 up \$20.50 ea</b>



Cat. HB-5468 150(D) x 200(H) x 305(W)  
**\$25.95 10 up \$24.50 ea**

## Metal Cases

As used in many popular magazine projects. Aluminium case finished in grey with black finish steel cover. Ventilated and supplied with rubber feet.

Cat. HB-5441	53(D) x 83(H) x 102(W)
<b>\$6.25</b>	<b>10 up \$6.00 ea</b>
Cat. HB-5442	150(D) x 81(H) x 210(W)
<b>\$6.50</b>	<b>10 up \$6.25 ea</b>
Cat. HB-5444	150(D) x 76(H) x 134(W)
<b>\$7.50</b>	<b>10 up \$7.00 ea</b>
Cat. HB-5446	184(D) x 70(H) x 160(W)
<b>\$10.95</b>	<b>10 up \$10.50 ea</b>

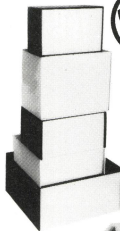


## Instrument Cases

High quality Australian made cabinets. Each box is manufactured with quality material throughout. The covers/sides/rear of the box are in mervel plate and the front panels in natural anodised 1.2mm thick aluminium.

There are two styles:  
Style A is a box which has top, bottom and sides formed as one piece. Front and rear panels are set in by about 8mm and located by a recessed flange. In this way you can remove both front and rear panels and the box retains its integrity. 8 Paneling screws are provided.  
Style B is the more conventional cabinet with the top and sides forming an inverted 'U' and the front, base and rear forming a 'U' as well. The two halves then mate together. The bottom section has folded returns for strength and fastening. The top has a completely folded back return for an attractive finish with strength.

Cat. HB-5480	STYLE A 90(D) x 125(H) x 192(W)
	<b>\$25.95</b>
Cat. HB-5481	A 140(D) x 175(H) x 225(W)
	<b>\$31.95</b>
Cat. HB-5482	B 145(D) x 115(H) x 210(W)
	<b>\$31.95</b>
Cat. HB-5483	B 200(D) x 90(H) x 220(W)
	<b>\$31.95</b>
Cat. HB-5484	B 280(D) x 145(H) x 300(W)
	<b>\$39.95</b>

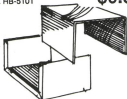


## Plain Aluminium

Made from 20g aluminium. Two handy sizes, screws included.

100(D) x 58(H) x 45(W)mm	<b>\$4.50</b>
Cat. HB-5100	<b>10 up \$4.25 ea</b>

150(D) x 100(H) x 70(W)	<b>\$6.50</b>	<b>10 up \$6.20</b>
Cat. HB-5101		

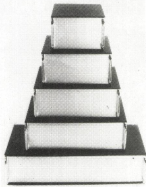


## Horwood Instrument Cases



These quality cases are popular for housing amplifiers, power supplies, instruments - anywhere a medium to large, good looking case is needed.

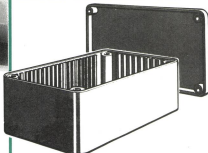
ALL CASES:	203(D) x 102(H)mm
	1 off 10+
Cat. HB-5472	153(W) <b>\$26.50 \$24.95</b>
Cat. HB-5473	213(W) <b>\$28.50 \$26.50</b>
Cat. HB-5474	254(W) <b>\$31.50 \$29.50</b>
Cat. HB-5475	314(W) <b>\$35.00 \$32.50</b>
Cat. HB-5476	401(W) <b>\$39.50 \$37.00</b>



## Diecast Aluminium

These are the ideal housing for any project needing durability and excellent shielding. Popular for RF projects, musical projects and automotive projects.

Cat. HB-5000	100(D)x25(H)x52(W)	\$7.25
		10+ \$7.00 ea
Cat. HB-5002	110(D)x30(H)x63(W)	\$7.95
		10+ \$7.50 ea
Cat. HB-5004	122(D)x41(H)x67(W)	\$9.50
		10+ \$9.00 ea
Cat. HB-5016	190(D)x60(H)x110(W)	\$20.95
Cat. HB-5020	118(D)x53(H)x94(W)	\$13.95



## Aluminium

Compact, economical cases for similar uses to the Zippy boxes, but where shielding is required.

Cat. HB-5494	125(D)x40(H)x65(W)mm
<b>\$5.75</b>	<b>10 up \$5.50 ea</b>
Cat. HB-5495	150(D)x55(H)x95(W)mm
<b>\$6.95</b>	<b>10 up \$6.50 ea</b>



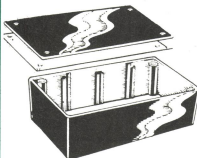
BRISBANE 07 393 0777

## Jiffy Boxes - In ABS Plastic

What can we say about these famous boxes. Ideal for any small project needing a quality, economical case. Unique horizontal PCB "snap-in" mounts as well as vertical card guides. Order your PCB's pre-sized and dispense with costly stand-offs, screws, etc. These utility boxes are used in dozens of ETI, AEM, EA and Silicon Chip projects.

### Black With Aluminium Lid

	Dimensions	1-9	10+
Cat. HB-6001	150x90x50	\$3.85	\$3.50
Cat. HB-6002	195x113x60	\$5.50	\$5.10
Cat. HB-6003	130x68x41	\$2.95	\$2.60
Cat. HB-6005	83x54x28	\$2.20	\$2.00



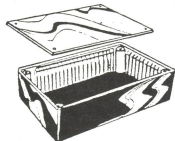
**Beware of inferior so-called equivalents which are moulded in cheaper Styrene which can crack when drilled**

### Black With Plastic Lid

Cat. HB-6011	150x90x50	\$3.99	\$3.75
Cat. HB-6013	130x68x41	\$3.25	\$3.00
Cat. HB-6015	83x54x28	\$2.40	\$2.20

### Grey With Plastic Lid

Cat. HB-6021	150x90x50	\$4.25	\$4.00
Cat. HB-6023	130x68x41	\$3.25	\$3.00
Cat. HB-6025	83x54x28	\$2.45	\$2.25



### PCB board width

Size	Vert	Horizontal
150 x 80 x 50	90	87
195 x 113 x 60	106	103
130 x 68 x 41	62	60
83 x 54 x 28	50	47

## Pro Quality Instrument Cases

Our superb instrument cases will give your projects the professional appearance they deserve.

- Internal mounting posts enable a wide combination of PCB's, transformers, etc., to be accommodated (screws supplied)
- PCB guide rails provided internally allow vertical PCB positioning to several locations
- Removable front and rear panels, attractive textured finish one side and plain the other. (Enables direct engraving, silk screening etc., to plain side)
- Top and bottom split apart for ease of construction or service. Integral feet included

• Great for test instruments and other high grade projects

**NOW AVAILABLE IN 3 GREAT SIZES**

**SMALL - NON VENTED**

Overall size: 150(W) x 160(D) x 65(H)mm

Cat. HB-5913

**\$12.95 10 up \$11.95 ea**

**MEDIUM - NON VENTED**

Overall size: 200(W) x 160(D) x 70(H)mm

Cat. HB-5912

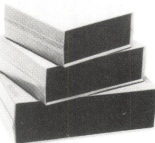
**\$14.95 10 up \$13.75**

**LARGE - VENTED CASE**

Overall size: 260(W) x 190(D) x 80(H)mm

Cat. HB-5910

**\$19.95 10 up \$18.50**



## Weatherproof Outdoor Plastic Enclosure

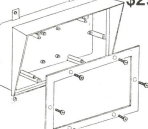


This enclosure is moulded in durable UV stabilised ABS plastic. The front cover is moulded in clear polycarbonate. A rubber gasket is supplied along with nylon cover fixing screws.

It is ideal for mounting an electronic assembly in the open. Because the cover is clear, circuitry inside can be operated by remote infra red control. It is also ideal for a weatherproof LED or liquid crystal display.

This is a high quality cabinet. Ideal for electric fences. Approx size: 250(L) x 90(D) x 125(H)mm

Cat. AB-6060



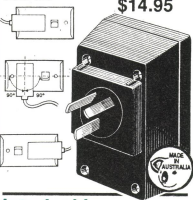
**\$29.95**

## 240V 3 Pin Plug/Enclosure

This enclosure which measures 78(L) x 50(W) x 40 (usable depth)mm has a moulded 240V 3 pin plug insert which can be rotated through 180° to allow the adaptor to mount in any of 3 positions (see fig. 1). There is a generous space inside the box to fit relays, electronics, etc. for whatever reason you like. We expect that many maine powered magazine projects will require this unique Jaycar product!

Cat. HB-5950

**\$14.95**



## Interlocking Parts Drawers

Unique side and top/bottom keying system allows you to use just a few or build a whole wall of drawers as your parts expansion dictates. Quality designed drawer slides will not 'click' or seize. Side handles also takes identity cards. Single or double drawers available.

Size: 110(W) x 120(D) x 50(H)mm

Cat. HB-6300

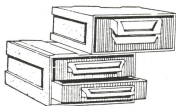
Cat. HB-6301

SINGLE DRAWER

DOUBLE DRAWER

**\$5.50 ea**

10 or more \$5.10 each



## Console Box

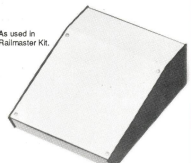
Size: 170(W) x 214(D) x 32(H) x 82(HR)mm

Cat. HB-6240

GREY

**\$27.95 ea**

As used in Raimaster Kit.

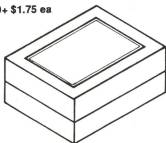


## Mini-Mini Plastic Snap Together Case

Our Smallest General Purpose Box!  
At last, a box for those REALLY SMALL projects - FM bugs, remote sensors, miniature radios, etc. Black in colour measuring (external) 45 x 35 x 19mm it is ideal for many applications. Case splits halfway down the sides and snaps together to save space.  
Cat. HB-6070

**\$1.95**

10+ \$1.75 ea

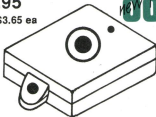


## Key-Fob style Burglar Alarm Transmitter Case

We dare not say which professional alarm company sold us this one! But after months of searching we have a product for our 1988 product line-up. The (black) case measures 42(L) x 31(W) x 11.8mm deep for a keying hole! 34(W) and only 11.8mm deep! The case is held together by one screw. The internals are 40.5 x 31 x 9.7mm deep - enough room for a transmitter and battery. The top of the case has a special hole for a pushbutton and another for a LED.  
Cat. HB-6072

**\$3.95**

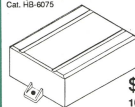
10+ \$3.65 ea



## Bulkhead Mount Plastic Case

A unique clip together case that features moulded in mounting feet on the sides. Measures 87(L) x 67(W) x 31(D)mm. Ideal for car burglar alarms, etc. Black in colour.

A bargain at only \$2.00  
Cat. HB-6075



**\$2.00**

10+ \$1.80 ea

## Bug Boxes



We are proud to announce a range of plastic anti-static enclosures basically for integrated circuits. It is in fact a system called "Bug Boxes". The Bug Box system is a complete storage/protection/identification and retrieval capability for, as we said, IC's, small other parts, such as screws, or even small tools!

The system is in fact completely modular. The user can purchase a single tray or establish a full blown storage and retrieval system from the modules described below. It is ideal for computer field service or in the lab for parts storage.

They are heavily injection moulded for long trouble free industrial use. Made in the USA.

## Bug Box

This is essentially a flat tray measuring 123(L) x 83(W) x 15(D)mm moulded in anti-static plastic with a clear locking plastic sliding cover. The cover has numbers marked on it that correspond to the compartments inside. It also has a unique patented feature which enables you to reveal one compartment per row without revealing the others and endangering their contents.

The Bug Box will hold 60 x 8 pin IC's or 30 x 14, 16, 18 or 20 pin IC's in its 30 separate compartments (each compartment measures 25.4(L) x 9.5(W) x 12.7(D)mm). The Bug Box tray is blue in colour and slides into the Bug Cage described elsewhere on this page.  
Cat. HB-6350

**\$5.95 each**

10 or more \$5.45 each

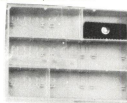


## LSI Bug Box

Similar in principle to the HB-6350 except that it is meant to store larger IC's or resistors, caps, etc. Also anti-static. Same external dimensions but with 3 compartments 107(L) x 25.4(W) x 12.7(D)mm which run the length of the tray. Six vertical and six horizontal clear plastic dividers are included to further subdivide the compartments in whatever configuration the user requires. Colour blue with clear cover.  
Cat. HB-6358

**\$7.95 each**

10 or more \$7.45 each



## Instrument Case

A proud addition to our range. This very attractive case is instrument blue in colour, made in ABS plastic, has removable front and rear panels, vented and looks extremely smart. Its along the same lines as our HB-5912 box, but not as high. Measures: 180(W) x 230(D) x 40(H)mm. Accepts PCB vertically 170 x 34mm and horizontally 220 x 145mm.

## Bug Cage

The heavy duty moulded cabinet accommodates up to 6 Bug Boxes. Once inserted each tray is spring loaded to stand proud of the front of the cabinet to allow easy removal between thumb and index finger. The cabinet also has tongue and groove dovetails to allow adjacent Bug Cages to interlock together to make a modular storage system.  
Size: 128(H) x 100(W) x 131(D)mm  
Cat. HB-6366

**\$9.95 each**

10 or more \$9.25 each

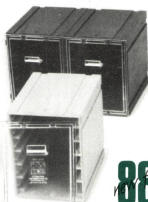


## Bug Cage Cover

A snap in clear acrylic door that can clip on the HB-6366 Bug Cage. Holds all trays securely in place and enables the user to identify various trays without the need to open the cabinet. As the trays are spring mounted in the cage, the cover keeps them securely in place. The trays will not rattle when a Cage Cover is fitted and is therefore a definite requirement for mobile use.  
Cat. HB-6370

10 or more \$6.45 each

**\$6.95 each**



## TURN YOUR SURPLUS STOCK INTO CASH!!

Jaycar will purchase your surplus stocks of components and equipment. We are continually on the lookout for sources of prime quality merchandise.

**CALL GARY JOHNSTON OR  
BRUCE ROUTLEY NOW ON  
(02) 747 2022**



Cat. HB-5915

**ONLY \$16.95**

**SPRINGVALE-VIC 03 547 1022**

## Brushed Aluminium

The following three knobs have a high quality brushed aluminium finish, an engraved pointer and very attractive appearance, making them suitable for Hi Fi projects or wherever a great appearance is required.

Cat. HK-7020 16 dia x 14mm H

**\$1.85 each**

10 up \$1.70 each

Cat. HK-7022 22 dia x 14mm H

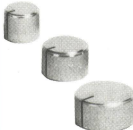
**\$1.95 each**

10 up \$1.75 each

Cat. HK-7024 28 dia x 14mm H

**\$2.85 each**

10 up \$2.60 each



## Polished Aluminium

18mm diameter

Cat. HK-7030

**\$1.75 ea**

10 up \$1.65 each



## Black Anodised

Anodised knobs that look a million dollars and will make your project look the same.

Cat. HK-7013 29 dia x 21mm H

**\$2.95 ea**

10 up \$2.75 ea

Cat. HK-7015 40 dia x 25mm H

**\$3.95 ea**

10 up \$3.60 ea

Note: HK-7013 & 7015 are matching

Cat. HK-7010 22 dia x 14mm H

**\$2.10 ea**

10 up \$2.00 ea



## Black Plastic

ALUMINIUM INSERT

2 SIZES

Cat. HK-7756 32 dia x 17mm H

**\$1.45 ea**

10 up \$1.30 ea

Cat. HK-7754 24mm dia

**\$1.35 ea**

10 up \$1.20 ea



## Black Plastic

ALUMINIUM INSERT

Ideal for projects. Aluminium insert in top, easy to see pointer

Cat. HK-7786 20 dia x 18mm H

**\$1.40 ea**

10 up \$1.25 ea



## Black Plastic

WITH POINTER

The old favourite, as supplied in countless kits.

Cat. HK-7787 29 dia x 14mm H

**\$1.10 ea**

10 up \$1.00 ea



## Skirt with Number 1-10

Cat. HK-7788 29mm dia

**\$1.65 ea**

10 up \$1.50 ea

Cat. HK-7549 36mm dia

**\$1.95 ea**

10 up \$1.80 ea



## Matching Equipment Style

A new range of plastic knobs with 1/4" shaft grub screw fixing. Modern fluted style with slot for pointer and small skirt. 4 matching sizes.

Cat. HK-7760 12 dia x 12mm H

**\$1.00 ea**

10 up 90c ea

Cat. HK-7762 20 dia x 16mm H

**\$1.30 ea**

10 up \$1.20 ea

Cat. HK-7764 24 dia x 20mm H

**\$1.40 ea**

10 up \$1.30 ea

Cat. HK-7766 35 dia x 19mm H

**\$1.65 ea**

10 up \$1.50 ea



## Cliff PushOn

These are amazing knobs, just push on to a standard 0.25" (1/4") shaft. No more messy screws. They are great for mixers, amplifiers, etc., where uniform size knobs are required, but need to be different at a glance. These priced kits are used on some of our higher priced kits. Complete with coloured cap. Made in England. 20mm diameter x 18mm high.

ALL ONE PRICE

**\$1.25 ea**

10 up \$1.10 ea



## Schadow Switch Knob

These are used on those pushbutton switch banks, as well as the Schadow push on/off switches. They have a square hole to accept shaft. 10mm diameter x 15mm high. Black in colour with silver top cap.

Cat. HK-7791

**50c ea**

10 up 45c ea



## Slider Pot Knobs

Jaycar increases their range of these rare slider pot knobs. Five different ones in all.

Style 1 and 2

Quality Cliff slider knobs to match their rotary knobs. Supplied with a white line down the centre and "fingergrasp" styling.

Size: 23 x 11 x 10mm high. Black in colour.

0.3mm shaft width

**\$1.25 ea**

10 or more \$1.10 ea

6mm shaft width

Cat. HK-7720

**\$1.25 ea**

10 or more \$1.10 ea



Style 3

Black body with white border on top and white pointer line down one side. Accepts 6mm shaft width.

Size: (at base) 17 x 13mm and 13mm high

Cat. HK-7725

**95c ea**

10 or more

85c ea



Style 4

Chrome body with single black line across centre of knob. This is the most conventional style slider pot.

Accepts 3mm width shafts.

Size Base: 15 x 9mm x 12mm high

Cat. HK-7728

**95c ea**

10 or more

85c ea



Style 5

Chrome body with rounded corners.

No marker line.

Size: 17(L) x 10 x 12mm high

Cat. HK-7730

**95c ea**

10 or more

85c ea



## Plastic Tit

A soft vinyl boot measuring approximately 3mm dia x 9mm long with a 2mm dia hole. The boot will slide over the activator of a miniature toggle switch or over the activator of a slide pot. As used on graphic equalisers.

White in colour.

Supplied in a pack of 10

Cat. HK-7790

**\$2.00**





## Fuses

### M205 (5 x 20mm)

#### QUICK BLOW

Cat. SF-2148 100mA  
Cat. SF-2150 125mA  
Cat. SF-2152 160mA

All above 50¢ ea

10 up 45¢ ea

Cat. SF-2154 250mA  
Cat. SF-2155 315mA  
Cat. SF-2156 500mA  
Cat. SF-2158 1A  
Cat. SF-2159 1.25A  
Cat. SF-2160 2A  
Cat. SF-2162 3A  
Cat. SF-2166 5A  
Cat. SF-2167 6.5A  
Cat. SF-2168 10A

All above 30¢ ea

10 up 25¢ ea

### 3AG (6.35 x 32mm)

#### QUICK BLOW

Cat. SF-2182 100mA  
Cat. SF-2184 150mA  
Cat. SF-2186 250mA  
Cat. SF-2188 500mA  
Cat. SF-2190 1A  
Cat. SF-2192 1.5A  
Cat. SF-2194 2A  
Cat. SF-2196 3A  
Cat. SF-2200 5A  
Cat. SF-2202 7.5A  
Cat. SF-2204 10A  
Cat. SF-2206 15A  
Cat. SF-2208 20A  
Cat. SF-2210 25A  
Cat. SF-2212 30A  
Cat. SF-2214 35A  
Cat. SF-2220 50A

All above 30¢ ea

10 up 25¢ ea

### 3AG SLOW BLOW

Cat. SF-2224 500mA  
Cat. SF-2226 1A  
Cat. SF-2228 2A  
Cat. SF-2230 3A  
Cat. SF-2232 5A

All above \$1.20

10 up \$1.00 ea

### 5AG 30 amp

Replacement type for  
inverter kit.

Cat. SF-2235

\$2.25

## Fuse Packs

The economical way to buy fuses.

### 3AG PACK

Consists of:  
4 x 500mA, 8 x 1A, 6 x 1.5A, 2 x 2A,  
6 x 3A, 4 x 5A, 2 x 7.5A, 4 x 10A  
Cat. SF-2242

40 fuses total value \$12.00

ONLY \$8.95

### M205 PACK

5 x 500mA, 10 x 1A, 10 x 2A, 5 x 3A  
5 x 5A, 10A  
Cat. SF-2242

40 fuses \$12.00 value

ONLY \$8.95

## Fuseholders

### IN-LINE

Plastic in-line type. As used on car  
radios, CB, etc. Takes 3AG fuses.

Cat. SZ-2015

\$1.10 ea

10 or more \$1.00 ea



### 3AG PANEL MOUNT

Panel mount type. Probably the  
most common type. Accepts  
3AG fuses. Panel hole 15mm

Cat. SZ-2020

\$1.40 ea

10 or more \$1.25 ea



### M205 PANEL MOUNT

M205 panel mount type. Takes  
M205 fuses (20 x 5mm). Panel hole  
13mm

Cat. SZ-2030

\$1.10 ea

10 or more \$1.00 ea



### PC MOUNT

3AG single.  
Cat. SZ-2034

40¢ ea

10 or more 36¢ ea



## SAFETY FUSEHOLDER

Fuse retainer is released by simply  
depressing catch by inserting a  
screwdriver or any similar tool or object  
in to the small rectangular hole on top of  
the fuseholder. Panel hole 15mm.

Cat. SZ-2036

\$1.50 each

10 or more \$1.40 ea



## Electricity Authority Approved Fuseholders

3AG 10 amp 240V chassis mount  
(32 x 6.35mm)

Cat. SZ-2025

\$3.95 ea

10 or more \$3.50 ea

M205 6.3A 240V chassis mount.

Cat. SZ-2028

\$2.50 ea

10 or more \$2.25 ea

SCHURTER BRAND



## 3AG Fuseclips

The easy way to secure fuses on  
a PCB.

PACKET OF 8

Cat. SZ-2022

\$1.20 pkt

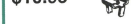
10 or more pkts

\$1.00 each

Pkt of 100

Cat. SZ-2023

\$10.95



## Car Blade Fuses

These are used in most new cars.  
They are easy to replace and are  
colour coded for easy identification.

Cat. SF-2130

5A Orange

Cat. SF-2132

7.5A Brown

Cat. SF-2134

10A Red

Cat. SF-2136

15A Blue

Cat. SF-2138

20A Yellow

50¢ ea

10 or more 45¢ ea



## NE2 Neon

90V pilot neon, as used in the  
strobe kits, etc.

Cat. SL-2690

50¢ ea

10 or more 40¢ ea



## Xenon Flash Tube

As used in the strobe kit.  
Cat. SL-2692

\$4.75 ea



## Low Voltage Bezel

Accepts Lilliput globes

Cat. SL-2620

RED

GREEN

Panel hole 10mm

\$1.65 ea

10 or more \$1.55 each



## Low Voltage Bezel

Includes 12V globe. High quality  
Panel hole 10mm  
LIMITED QUANTITIES

Cat. SL-2625

600 available

Cat. SL-2626

700 available

ORANGE

GREEN

ONLY \$1.95 ea

10 or more \$1.65 each



## 240V Chrome Bezel

Very smart unit. Complete  
with leads.

Cat. SL-2632

Cat. SL-2633

Panel Hole 7mm

RED

GREEN

\$1.80 ea

10 or more \$1.70 each



## LED Bezel

Chrome housing, 2 volt  
Cat. SL-2610 RED  
Cat. SL-2612 GREEN  
Panel hole 5mm

**\$1.75 ea**  
10 or more \$1.60 ea



## 12 Volt Bezel

Red, sealed, 12 volt bezel for any application - small size. Panel hole 7mm  
Cat. SL-2640

**\$2.20 ea**  
10 or more \$2.00 ea



## 240V Bezel

Red, sealed, accepts spade lugs or solder. Drill 10mm hole and push in.  
Cat. SL-2630

**\$1.20 ea**  
10 or more \$1.10 ea



## 12 Volt Bezel

Perfect for car alarms. Orange lens which measures 20 x 20mm.  
As used in our Claytons burglar alarm kit. Panel hole 15mm.  
Cat. SL-2694



## Mini Lamps

### 12 & 6 VOLT MINI LAMPS

Perfect for lighting dials, meters, etc.

**12 VOLT**  
Cat. SL-2639  
Cat. SL-2616

**65¢ ea**  
10 or more 59¢ ea

**6 VOLT**  
Cat. SL-2641  
**40¢ ea**  
10 for \$2.50  
100 for \$15.00



## MINIATURE EDISON SCREW GLOBES

Cat. SL-2654 6.3V  
Cat. SL-2656 12V  
**50¢ ea**  
10 or more \$45¢ ea



## LILLIPUT GLOBES

Cat. SL-2650 6.3V  
Cat. SL-2652 12V  
**40¢ ea**  
10 or more 35¢ eac



## Globe Holder

Standard MES globe holder  
Cat. SL-2658  
**40¢ ea**  
10 or more 35¢ ea



## Car Replacement Globes

Replacement globes for flashing switches/bezels for car alarms.

1) Most common. 12V push-in metal flange up 2 sides. Used in Red Light, Yellow Light, Pirahana & Cobra.  
Cat. SL-2638

**\$5.50**



2) Used in Yellow Light & others  
Cat. SL-2637

**\$4.50**



3) Used in Yellow Light & others.  
Cat. SL-2636

**\$4.50**



## Green Panel Indicator

This great new indicator pushes into a 9mm hole in a panel and then a 6 or 12 volt lamp (SL-2639 or SL-2641) pushes into the back and will stay there. Economical way if many bezels are needed. Panel hole 9mm.

**40¢ ea**  
10 or more 35¢ ea



## Lead Acid Rechargeable

Ideal for alarms or anywhere where constant use depletes batteries quickly. Size: 100(L) x 60(H) inc terminals x 45(W)mm  
**12 VOLT 1.2A/H**  
Cat. SB-2480

**\$22.50**

**12VOLT 4.5A/H**  
150(L) x 95(H) inc terminals x 65(W)mm.  
Cat. SB-2486

**\$43.50**



## 12 Volt Battery VR22, EL12

Used in lighters, cameras and where recently car alarm remote switches.

**CARBON ZINC**  
Cat. SB-2420

**PACKET OF 2**

**\$3.75**



## Eveready Red

Cat. SB-2354 AA Pkt of 4

**\$2.35**

Cat. SB-2358 C Pkt of 2

**\$1.99**

Cat. SB-2362 D Pkt of 2

**\$2.40**

Cat. SB-2370 9 volt each

**\$2.40**



## Watch/Game Batteries



### EQUIVALENTS

Cat. No	Silver Oxide	Hitech/Maxell
SB-2512 (G13)	SR44	
SB-2510 (G12)	SR43W	
SB-2508 (G10)	SR1130W	
SB-2506 (G8)	SR1120W	
SB-2504 (G5)	SR48W	
SB-2502 (G3)	SR41W	
SB-2500 (G2)	SR726SW	

### ALKALINE

SB-2516	LR-44
SB-2514	LR-43
SB-2518	LR-1130

## Penlight NiCads

Don't keep wasting money buying throw-away batteries. Step up to NiCad rechargeables. **SUPERB ROCKET BRAND AA PENLIGHT 450mA**  
Cat. SB-2452

**\$4.25 ea**  
10+ \$3.85 ea  
4 for \$16.00



## Rechargeable Batteries

### "C" SIZE

1.2 A/H capacity  
Cat. SB-2455

**PACKET OF 2 \$22.50**

### "D" SIZE

1.2 A/H capacity  
Cat. SB-2456

**PACKET OF 2 \$23.95**

### 9 VOLT

100mA capacity - priced per each  
Cat. SB-2458

**\$23.95**

### AAA SIZE

180mAh  
Cat. SB-2454

**PACKET OF 2 \$11.50**

## Eveready Alkaline

Cat. SB-2380 AAA Pkt of 2

**\$3.95**

Cat. SB-2382 AA Pkt of 2

**\$3.25**

Cat. SB-2386 C Pkt of 2

**\$4.50**

Cat. SB-2390 D Pkt of 2

**\$4.95**

Cat. SB-2395 9 volt each

**\$6.75**

Cat. SB-2396 N Pkt of 2

**\$3.45**

Cat. SB-2397 544 6 volt each

**\$7.50**

Eveready National Price (ea)

357	WL-14	\$3.95
386	WL-11	\$3.45
389	WL-10	\$3.95
391	GB	\$3.45
393	WL-6	\$2.95
392	WL-1	\$2.75
396		\$3.45

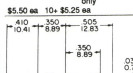


## Mini Toggle

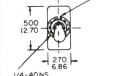
6mm mounting hole  
Rating 2A 250V AC



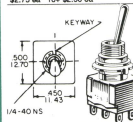
Cat. ST-0550 SPDT  
\$1.95 10+ \$1.85 ea  
Cat. ST-0558 SPDT Centre  
Off  
\$2.50 ea 10+ \$2.30 ea  
Cat. ST-0569 SPDT Centre  
Off spring  
loaded return to  
centre one side  
only



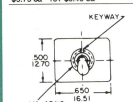
KEYWAY



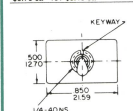
Cat. ST-0552 DPDT  
\$2.35 ea 10+ \$2.20 ea  
Cat. ST-0560 DPDT Centre  
Off  
\$2.75 ea 10+ \$2.50 ea



Cat. ST-0505 3PDT  
\$5.75 ea 10+ \$5.45 ea



Cat. ST-0506 4PDT  
\$6.75 ea 10+ \$6.40 ea

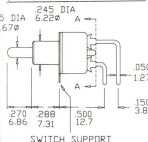


## PCB Mount Mini Toggle

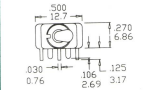
Rated 2A 250V AC



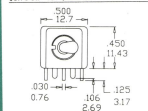
Cat. ST-0562 SPDT PC Mount  
\$3.20 ea 10+ \$3.00 ea



SWITCH SUPPORT



Cat. ST-0565 DPDT PC Mount  
\$3.50 ea 10+ \$3.25 ea  
Cat. ST-0566 DPDT PC Mount  
Centre Off  
\$3.75 ea 10+ \$3.50 ea



## Standard Toggle

Chrome toggle, on/off indicator plate.  
Suitable for hobbyist and auto use.

Cat. ST-0570 SPST  
Body size 26 x 14mm, clearance  
20.5mm, mounting hole 12mm  
\$1.65 ea 10+ \$1.55 ea

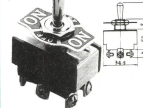
Cat. ST-0572 DPDT  
Body size 29.5 x 18mm, clearance  
23mm, mounting hole 12mm  
\$2.10 ea 10+ \$2.00 ea



## Heavy Duty Centre Off

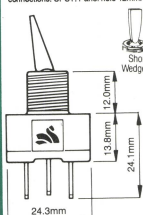
Huge 10A 125V rating, chrome toggle  
with on/off indicator plate. DPDT centre  
off. Body size 35 x 20mm, clearance  
26mm, mounting hole 12mm.  
Cat. ST-0576

\$3.50 ea 10+ \$3.25 ea



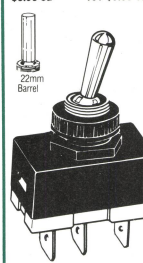
## 240V 10A Toggle Switches

Swann series 475 with spade lug  
connections. SPST. Panel hole 12mm.



Type 1. Actuator is a short wedge  
type 12mm long. Black  
Cat. ST-0590  
\$2.95 ea 10+ \$2.65 ea

Type 2. Actuator is a chrome barrel  
type 22mm long. Very classy.  
Cat. ST-0592  
\$3.95 ea 10+ \$3.60 ea

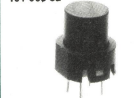


## Snap Action Keyboard Switches

PCB Mount, double pole. Suitable for  
keyboards, security systems, etc. 5  
colours. These switches are normally  
open DPST. When the button is  
depressed the switch closes, but only  
while the button is held down.  
Cat. SP-0720 Red  
Cat. SP-0721 Black  
Cat. SP-0722 Yellow  
Cat. SP-0723 White  
Cat. SP-0724 Green

\$1.00 ea

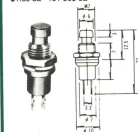
10+ 90c ea



## Miniature Pushbutton

6mm mounting hole. 125V 3 amp  
rating. Momentary action.  
Cat. SP-0710 Push-on red  
button  
55c ea 10+ 50c ea  
Cat. SP-0711 Push-on Black  
button

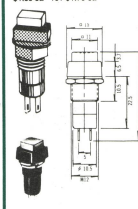
55c ea 10+ 50c ea  
Cat. SP-0726 Push-off  
\$1.00 ea 10+ 90c ea



## Pushbutton

Rated 3A 125V AC  
Push-on Momentary SPST  
Cat. SP-0716  
\$1.90 ea 10+ \$1.70 ea

Push-on/Push-off SPST  
Cat. SP-0718  
\$1.90 ea 10+ \$1.70 ea

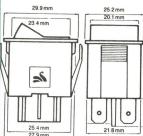


## Illuminated 240V Rocker Switch

Swan series 51 type.  
DPDT 240V 15 amp illuminated with  
spade leg connections. Panel cut out  
26.6mm x 22.3mm.  
RED as used in ET15000 power  
amp  
Cat. SK-0982  
**\$4.95 ea 10+ \$4.50 ea**



ORANGE with low Vee button  
style  
Cat. SK-0980  
**\$3.95 ea 10+ \$3.50 ea**

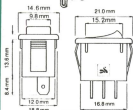


## Mains Rated Rocker Switches

Two very classy mains rocker  
switches. These are smaller than  
normal rockers and are perfect for  
amplifiers, etc. The illuminated  
version is supplied in our Playmaster  
6060 amplifier kit.  
Size: 21 x 15mm. Panel cut out size  
13 x 19.5mm.

**TYPE 1**  
SPST 5A Black actuator  
Cat. SK-0984  
**\$2.50 ea 10+ \$2.25 ea**

**TYPE 2**  
ILLUMINATED ACTUATOR  
SPDT 6A 240V  
Cat. SK-0985  
**\$3.95 ea 10+ \$3.50 ea**  
**WAS \$7.50 LAST YEAR**



## Illuminated LED Rocker Switch

Swan type 41 series. SPST 12 volt with  
LED (red) mounted in actuator. Very  
nice switch suited for driving lights etc.  
Panel cutout 28.5mm x 11.7mm.  
Button style flat.  
Cat. SK-0986  
**\$3.95 ea 10+ \$3.50 ea**



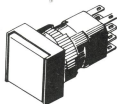
## Rocker Switch

DPDT black actuator. Size 22(L) x  
13(W)mm. Mounting holes 36mm apart.  
Cat. SK-0975  
**90c ea 10+ 80c ea**



## 12 Volt Illuminated Push On/Off

Similar to the one used in the Red Light  
Car Alarms and in our Flasher Deterrent  
kit (see kit section)  
RED Cat. SP-0742  
YELLOW Cat. SP-0740  
**\$15.95 ea**  
**WAS \$21.50**



## Microswitch

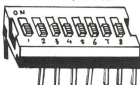
SPDT 240V at 1.5 amp. Size 26 x  
10mm x 11(H)mm (body only). Supplied  
with actuator 60mm long which can be  
removed.  
Cat. SM-1040  
**\$2.35 ea 10+ \$2.20 ea**



## DIL Switches

Dual in-line fits in IC socket, self  
wiping contacts

**4 WAY (8 pin DIL pkg)**  
Cat. SM-1020  
**\$2.20 ea 10+ \$2.10 ea**  
**8 WAY (16 pin DIL pkg)**  
Cat. SM-1024  
**\$2.75 ea 10+ \$2.50 ea**



## Mini Reed Switch

**NORMALLY OPEN**  
Cat. SM-1002  
**\$1.20 ea 10+ \$1.10 ea**  
**REED COIL TO SUIT**  
Cat. SM-1004  
**\$1.20 ea 10+ \$1.10 ea**



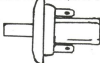
## Mercury Switch

Glass encapsulated 125V 3 amp AC.  
Cat. SM-1035  
**\$2.25 ea 10+ \$2.05 ea**



## Alarm Tamper Switch

Full details alarm section.  
Cat. LA-5066  
**\$2.60 ea 10+ \$2.40 ea**



## Barrel Key Switch

For high security installations.  
4 pole 2 position.  
Cat. SM-1033  
**\$10.95 ea 10+ \$10.50 ea**



## Barrel Key Switch Cam Lock

Made from zinc die cast. Used in  
Alarms, petty cash boxes, etc.  
Cat. SM-1029  
**\$6.95 ea**



## Keyswitch Standard Type

Solid barrel type. 19.5mm mounting  
hole. SPST action. Supplied with two  
(2) keys.  
Cat. SM-1030  
**\$7.50 ea**



## Barrel Key Switch

Can be used in your telephone to  
stop unauthorised calls. Rated at 3  
amp, 2 keys supplied.  
Cat. SM-1027  
**\$9.95**  
**10+ \$8.95 ea**



## Alarm Tamper (Pin) Switch

Full details alarm section.  
Cat. LE-8775  
**\$1.25 ea 10+ \$1.15 ea**







## Jaycar Introduces the Easy Way to Buy 1/4 watt Resistors

88

Don't ever be short of that resistor again. Jaycar now has available 7 different packs of 144W 5% resistors available.

Each pack contains 10 of each value, and packs cover the complete range from 1 ohm to 10M ohms.

Values (10 of each) 1, 1.2, 1.5, 1.8, 2.2, 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 8.2 ohms

Values (10 of each) 10, 12, 15, 18, 22, 27, 33, 39, 47, 56, 68, 82 ohms

Values (10 of each) 100, 120, 150, 180, 220, 270, 330, 390, 470, 560, 680, 820 ohms

Values (10 of each) 1k, 1.2, 1.5, 1.8, 2.2, 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 8.2k

Values (10 of each) 10k, 12, 15, 18, 22, 27, 33, 39, 47, 56, 68, 82k

Values (10 of each) 100k, 120, 150, 180, 220, 270, 330, 390, 470, 560, 680, 820k

Values (10 of each) 1M, 1.2, 1.5, 1.8, 2.2, 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 8.2M

1 pack of each of the above. 7 packs in all giving a total of 850 resistors 10 of each value Cat. RR-1697 VALUE AT \$19.95 SAVE \$7.70 over buying individual packs

SAVE \$22.55 OVER BUYING INDIVIDUAL PARTS!

**A GREAT WAY TO NEVER BE OUT OF THAT ODD RESISTOR AND SAVE A PACKET AT THE SAME TIME!!**

A	B	C	D	E	F	A	B	C	D	E		
OR1					RR-3206	1K6	RR-0577				A. 1/4W Metal Film	
OR22					RR-3206	1K8	RR-0578	RR-1582	RR-2280	RR-2780	RR-3304	1% 50ppm 9e each -
OR47					RR-2500	2K0	RR-0579					100 up 7e each
OR75					RR-3214	2K2	RR-0580	RR-1584	RR-2282	RR-2782	RR-3306	
OR82					RR-3219	2K4	RR-0581					B. 1/4W Carbon Film
1R0					RR-3220	2K7	RR-0582	RR-1586	RR-2284	RR-2784	RR-3308	5% 5e each -
1R1	RR-1502	RR-2002	RR-2502	RR-3220	RR-3340	3K0	RR-0583					100 up 4e each
1R2	RR-1504	RR-2004	RR-2504		RR-3341	3K3	RR-0584	RR-1588	RR-2286	RR-2786	RR-3310	
1R3	RR-1506	RR-2006	RR-2506	RR-3230	RR-3342	3K6	RR-0585					
1R5					RR-3343	3K9	RR-0586	RR-1590	RR-2288	RR-2788		
1R6	RR-1508	RR-2008	RR-2508	RR-3232	RR-3343	4K3	RR-0587					C. 1/2W Carbon Film
1R8					RR-3344	4K7	RR-0588	RR-1592	RR-2290	RR-2790	RR-3312	5% 7e each -
2R0	RR-1510	RR-2010	RR-2510	RR-3234	RR-3344	5K6	RR-0590	RR-1594	RR-2292	RR-2792		100 up 16e each
2R2					RR-3345	6K2	RR-0591					
2R4	RR-1512	RR-2012	RR-2512	RR-3236	RR-3345	6K8	RR-0592	RR-1596	RR-2294	RR-2794		
2R7					RR-3346	7K3	RR-0593					D. 1W Carbon Film
3R0	RR-1514	RR-2014	RR-2514	RR-3238	RR-3346	8K2	RR-0594	RR-1598	RR-2296	RR-2796		5% (RR-2502/2524)
3R3					RR-3347	9K1	RR-0595					200e each -
3R6	RR-1516	RR-2016	RR-2516	RR-3240	RR-3347	10K	RR-0596	RR-1600	RR-2298	RR-2798		100 up 17e each
3R9					RR-3348	11K	RR-0597					1W Carbon Film 5%
4R3	RR-1518	RR-2018	RR-2518	RR-3242	RR-3348	12K	RR-0598	RR-1602	RR-2300	RR-2800		(RR-2526/2778)
4R7					RR-3349	13K	RR-0599					15e each -
5R1	RR-1520	RR-2020	RR-2520	RR-3244	RR-3349	15K	RR-0600	RR-1604	RR-2302	RR-2802		100 up 14e each
5R6					RR-3350	16K	RR-0601					
6R2	RR-1522	RR-2022	RR-2522	RR-3246	RR-3350	18K	RR-0602	RR-1606	RR-2304	RR-2804		
6R8					RR-3351	20K	RR-0603					E. 5W Wirewound
7R5	RR-1524	RR-2024	RR-2524	RR-3248	RR-3351	22K	RR-0604	RR-1608	RR-2306	RR-2806		65e each -
8R1					RR-3352	24K	RR-0605					10 up 60e each
10R	RR-1526	RR-2026	RR-2526	RR-3250	RR-3352	27K	RR-0606	RR-1610	RR-2308	RR-2808		
11R					RR-3353	30K	RR-0607					
12R	RR-1528	RR-2028	RR-2528	RR-3252	RR-3353	33K	RR-0608	RR-1612	RR-2310	RR-2810		
13R					RR-3354	36K	RR-0609					F. 10W wirewound
15R	RR-1530	RR-2030	RR-2530	RR-3254	RR-3354	39K	RR-0610	RR-1614	RR-2312	RR-2812		\$1.30 each -
16R					RR-3355	43K	RR-0611					10 up \$1.20 each
18R	RR-1532	RR-2032	RR-2532	RR-3256	RR-3355	47K	RR-0612	RR-1616	RR-2314	RR-2814		
18R					RR-3356	51K	RR-0613					
20R	RR-1534	RR-2034	RR-2534	RR-3258	RR-3356	56K	RR-0614	RR-1618	RR-2316	RR-2816		
22R					RR-3357	62K	RR-0615					
24R	RR-1536	RR-2036	RR-2536	RR-3260	RR-3357	68K	RR-0616	RR-1620	RR-2318	RR-2818		
27R					RR-3358	75K	RR-0617					
30R	RR-1538	RR-2038	RR-2538	RR-3262	RR-3358	82K	RR-0618	RR-1622	RR-2320	RR-2820		
33R					RR-3359	91K	RR-0619					
36R	RR-1540	RR-2040	RR-2540	RR-3264	RR-3359	100K	RR-0620	RR-1624	RR-2322	RR-2822		
39R					RR-3360	110K	RR-0621					
43R	RR-1542	RR-2042	RR-2542	RR-3266	RR-3360	120K	RR-0622	RR-1626	RR-2324	RR-2824		
47R					RR-3361	130K	RR-0623					
51R	RR-1544	RR-2044	RR-2544	RR-3268	RR-3361	150K	RR-0624	RR-1628	RR-2326	RR-2826		
56R					RR-3362	160K	RR-0625					
62R	RR-1546	RR-2046	RR-2546	RR-3270	RR-3362	180K	RR-0626	RR-1630	RR-2328	RR-2828		
68R					RR-3363	200K	RR-0627					
75R	RR-1548	RR-2048	RR-2548	RR-3272	RR-3363	220K	RR-0628	RR-1632	RR-2330	RR-2830		
82R					RR-3364	240K	RR-0629					
91R	RR-1550	RR-2050	RR-2550	RR-3274	RR-3364	270K	RR-0630	RR-1634	RR-2332	RR-2832		
100R					RR-3365	300K	RR-0631					
110R	RR-1552	RR-2052	RR-2552	RR-3276	RR-3365	330K	RR-0632	RR-1636	RR-2334	RR-2834		
120R					RR-3366	360K	RR-0633					
130R	RR-1554	RR-2054	RR-2554	RR-3278	RR-3366	390K	RR-0634	RR-1638	RR-2336	RR-2836		
150R					RR-3367	430K	RR-0635					
160R	RR-1556	RR-2056	RR-2556	RR-3280	RR-3367	470K	RR-0636	RR-1640	RR-2338	RR-2838		
180R					RR-3368	510K	RR-0637					
200R	RR-1558	RR-2058	RR-2558	RR-3282	RR-3368	560K	RR-0638	RR-1642	RR-2340	RR-2840		
220R					RR-3369	620K	RR-0639					
240R	RR-1560	RR-2060	RR-2560	RR-3284	RR-3369	680K	RR-0640	RR-1644	RR-2342	RR-2842		
270R					RR-3370	750K	RR-0641					
300R	RR-1562	RR-2062	RR-2562	RR-3286	RR-3370	820K	RR-0642	RR-1646	RR-2344	RR-2844		
330R					RR-3371	910K	RR-0643					
360R	RR-1564	RR-2064	RR-2564	RR-3288	RR-3371	1M0	RR-0644	RR-1648	RR-2346	RR-2846		
390R					RR-3372	1M2		RR-1650	RR-2348	RR-2848		
430R	RR-1566	RR-2066	RR-2566	RR-3290	RR-3372	1M5		RR-1652	RR-2350	RR-2850		
470R					RR-3373	1M8		RR-1654	RR-2352	RR-2852		
510R	RR-1570	RR-2070	RR-2570	RR-3292	RR-3373	2M2		RR-1656	RR-2354	RR-2854		
560R					RR-3374	2M7		RR-1658	RR-2356	RR-2856		
620R	RR-1572	RR-2072	RR-2572	RR-3294	RR-3374	3M3		RR-1660	RR-2358	RR-2858		
680R					RR-3375	3M9		RR-1662	RR-2360	RR-2860		
750R	RR-1574	RR-2074	RR-2574	RR-3296	RR-3375	4M7		RR-1664	RR-2362	RR-2862		
820R					RR-3376	5M6		RR-1666	RR-2364	RR-2864		
910R	RR-1576	RR-2076	RR-2576	RR-3298	RR-3376	6M8		RR-1668	RR-2366	RR-2866		
1K0					RR-3380	8M2		RR-1670	RR-2368	RR-2868		
1K1	RR-1578	RR-2078	RR-2578	RR-3300		10M	RR-0660	RR-1672	RR-2370	RR-2870		
1K2												
1K3	RR-1580	RR-2078	RR-2578	RR-3302								
K5												
KS	RR-1580	RR-2278	RR-2778	RR-3302								



**MAIL ORDERS-INQUIRIES 02 747 1888**

## Direct Import PCB Mounting Potentiometers with Imperial Standard Shaft & Bushings

After suffering enormous supply frustration in recent years we have decided to direct import quality potentiometers to our rigid engineering specifications. The potentiometers are full size - 24mm diameter types - not the dinky 16mm ones that you sometimes see these days. They also have genuine 6.35mm (1/4") shafts with mounting. The shaft is a generous 38mm long. The bush is a 3/8" 32 T.H.D. type which we believe is necessary for good fixing to a panel. Many pots these days have 7mm - and less - bushes.

Another important feature of the pots is their PCB mount capability. The pins are rigidly mounted on phenolic with the centre pin offset from the two outer terminals. When soldered into a PCB, the pot is quite rigidly held on its own. Dual gang pots are held in 6 places and require no extra mechanical mounting assistance. The pins are large enough to terminate screened cable, etc., if the job requires hard wiring. An engineering drawing appears below. You may safely use it to design PCB artwork etc., as we have standardised on this design.

### CUSTOMERS PLEASE NOTE:

While we are introducing stock of our new pots there will naturally be a transition period where old stock will remain. This may not be a cause for concern but if it is, please ASK for the new product. (The cat numbers will be the same.)

### Log Single Gang

RP-3604 1k	
RP-3606 5k	
RP-3610 10k	
RP-3614 25k	
RP-3616 50k	
RP-3618 100k	
RP-3620 250k	
RP-3622 500k	
RP-3624 1M	
RP-3626 2M	
RP-3658 10k anti-log	

**\$1.65 ea**

**10 or more**

**\$1.40 each**

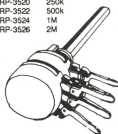
### Linear Single Gang

Cat. No	Type	
RP-3502	500R	
RP-3504	1k	
RP-3506	5k	
RP-3510	10k	
RP-3514	25k	
RP-3516	50k	
RP-3518	100k	
RP-3520	250k	
RP-3522	500k	
RP-3524	1M	
RP-3526	2M	

**\$1.65 ea**

**10 or more**

**\$1.40 each**



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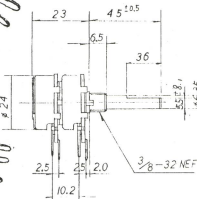
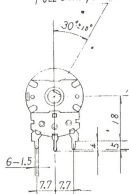
### Linear Double Gang

Cat. No	Type	
RP-3706 10k		<b>\$3.25 ea</b>
RP-3708 25k		<b>10 or more</b>
RP-3710 50k		<b>\$3.00 each</b>
RP-3712 100k		
RP-3716 500k		
RP-3718 1M		

### Log Double Gang

Cat. No	Type	
RP-3756 10k		<b>\$3.25 ea</b>
RP-3758 25k		<b>10 or more</b>
RP-3760 50k		<b>\$3.00 each</b>
RP-3762 100k		
RP-3766 500k		
RP-3768 1M		
RP-3768 250k		

FULL C.C.W POSITION



## Wire Wound

3 WATT - WITH SOLDER LUG

Cat. RP-3954	25 ohm
Cat. RP-3956	50 ohm
Cat. RP-3958	100 ohm

**\$7.50 ea**

**10 or more \$7.20 ea**

## Vertical Miniature Trimpots 10mm

OPEN CARBON TYPE

Cat. No	Type	
RT-4030	100 ohm	<b>50¢ ea</b>
RT-4031	200 ohm	<b>10 or more</b>
RT-4033	500 ohm	<b>45¢ ea</b>
RT-4034	1k	
RT-4035	2k	
RT-4037	5k	
RT-4039	10k	
RT-4040	20k	
RT-4042	50k	
RT-4043	100k	
RT-4044	200k	
RT-4046	500k	
RT-4047	1M	
RT-4048	2M	



## Vertical Miniature Trimpots 5mm

OPEN CARBON TYPE

Cat. No	Type	
RT-4004	100 ohm	<b>50¢ ea</b>
RT-4006	250 ohm	<b>10 or more</b>
RT-4008	500 ohm	<b>45¢ ea</b>
RT-4010	1k	
RT-4012	2k	
RT-4014	5k	
RT-4016	10k	
RT-4018	20k	
RT-4020	50k	
RT-4022	100k	
RT-4024	250k	
RT-4026	500k	
RT-4028	1M	
RT-4029	2.2M	



## Horizontal Mini Trimpot

Cat. No	Type	
RT-4302	100 ohm	<b>80¢ ea</b>
RT-4304	500 ohm	<b>10 or more</b>
RT-4306	1k	<b>70¢ each</b>
RT-4308	2k	
RT-4310	5k	
RT-4312	10k	
RT-4314	20k	
RT-4316	50k	
RT-4318	100k	
RT-4320	200k	
RT-4324	500k	
RT-4328	1M	
RT-4330	2M	



## Slider Pots -

45mm TYPE

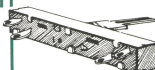
Cat. No	Type	
RP-3904	2k linear	
RP-3912	50k linear	
RP-3910	50k log	
	10 or more	<b>\$3.95 ea</b>
	10 or more	<b>\$3.50</b>

60mm TYPE

Cat. RP-3938 10K LOG

**\$5.50 ea**

**10 or more \$5.00 ea**



## Log Switch Pots

Rotary log switch pots with DPST switch and 6.35mm (1/4") shaft with solder terminals

RP-3809 1k		<b>\$2.95 ea</b>
RP-3812 25k		<b>10 or more</b>
RP-3814 50k		<b>\$2.70 ea</b>
RP-3818 100k		
RP-3822 500k		



## Multiturn Cermet

Cat. No	Type	
RT-4602	100 ohm	
RT-4604	500 ohm	
RT-4606	1k	<b>\$1.95 ea</b>
RT-4610	2k	<b>10 or more</b>
RT-4612	5k	<b>\$1.80 ea</b>
RT-4614	10k	
RT-4616	20k	
RT-4618	50k	
RT-4620	100k	
RT-4622	1M	



## Sub Miniature Control

Just like the type used in small radios for on/off and volume. Includes knob and screws.

Cat. RP-3831		<b>\$2.25 ea</b>
	10 or more	<b>\$2.00 each</b>



## Cassette Player Replacement

Ideal replacement volume and on/off switch for car stereos etc. Dual concentric 50k log. 50k in with a pushbutton SP switch. Total length 70mm, 18mm diameter. Cat. RP-3835

<b>\$9.95</b>	
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**HURSTVILLE 570 7000**

Potentiometers

## Electrolytic Axial (RT)

Cat. No.	Type	1-9	10+
Cat. RE-5801	0.47uF 63V	35¢	32¢
Cat. RE-5802	1uF 63V	35¢	32¢
Cat. RE-5804	2.2uF 63V	35¢	32¢
Cat. RE-5810	3.3uF 25V	40¢	36¢
Cat. RE-5815	4.7uF 25V	40¢	36¢
Cat. RE-5820	4.7uF 63V	40¢	36¢
Cat. RE-5832	10uF 25V	35¢	32¢
Cat. RE-5840	10uF 63V	45¢	43¢
Cat. RE-5855	25uF 25V	35¢	32¢
Cat. RE-5860	25uF 63V	35¢	34¢
Cat. RE-5864	47uF 16V	35¢	32¢
Cat. RE-5865	47uF 25V	35¢	32¢
Cat. RE-5875	47uF 63V	45¢	42¢
Cat. RE-5878	68uF 64V	50¢	40¢
Cat. RE-5879	100uF 16V	45¢	40¢
Cat. RE-5880	100uF 25V	55¢	50¢
Cat. RE-5885	100uF 63V	70¢	65¢
Cat. RE-5888	100uF 250V	\$1.00	80¢
Cat. RE-5892	220uF 16V	50¢	45¢
Cat. RE-5895	220uF 25V	45¢	40¢
Cat. RE-5897	220uF 63V	\$1.00	90¢
Cat. RE-5901	470uF 16V	80¢	75¢
Cat. RE-5903	470uF 25V	\$1.30	\$1.20
Cat. RE-5905	470uF 50V	\$1.90	\$1.80
Cat. RE-5908	680uF 40V	\$1.20	\$1.00
Cat. RE-5909	680uF 63V	\$1.50	\$1.30
Cat. RE-5912	1000uF 12V	\$1.00	90¢
Cat. RE-5915	1000uF 25V	\$1.40	\$1.30
Cat. RE-5918	1000uF 35V	\$1.80	70¢
Cat. RE-5920	1000uF 63V	\$2.85	\$2.65
Cat. RE-5930	2500uF 16V	\$1.85	\$1.75
Cat. RE-5935	2500uF 25V	\$2.95	\$2.75
Cat. RE-5940	2200/2500uF	\$3.50/\$3.25	\$3.00
Cat. RE-5945	2500uF 60V	\$3.50	\$3.25
Cat. RE-5970	4700uF 16V	\$2.50	\$2.00
Cat. RE-5975	4700uF 35V	\$5.75	\$5.45

## RBLL Low Leakage Electrolytics

Cat. No.	Type	1-9	10+
RL-6402	0.1uF 50V	32¢	30¢
RL-6404	0.15uF 50V	32¢	30¢
RL-6406	0.22uF 50V	32¢	30¢
RL-6408	0.33uF 50V	32¢	30¢
RL-6410	0.47uF 50V	32¢	30¢
RL-6412	0.68uF 50V	32¢	30¢
RL-6414	1.0uF 50V	35¢	32¢
RL-6418	1.5uF 50V	35¢	32¢
RL-6420	2.2uF 50V	35¢	32¢
RL-6422	3.3uF 50V	35¢	32¢
RL-6424	4.7uF 50V	35¢	32¢
RL-6426	6.8uF 50V	40¢	36¢
RL-6428	10uF 50V	45¢	42¢
RL-6430	22uF 50V	45¢	42¢
RL-6432	33uF 50V	45¢	42¢
RL-6434	47uF 50V	65¢	60¢
RL-6436	100uF 25V	80¢	72¢

## Electrolytic RB (PC Mount)

Cat. No.	Type	1-9	10+
RE-6020	U47 63V	30¢	28¢
RE-6030	1U 50V	28¢	26¢
RE-6032	1U 63V	32¢	30¢
RE-6036	2.2U 25V	28¢	26¢
RE-6042	2U2 63V	30¢	28¢
RE-6045	3.3U 16V	28¢	26¢
RE-6050	4U7 25V	28¢	26¢
RE-6060	4U7 50V	35¢	34¢
RE-6066	10U 16V	28¢	26¢
RE-6070	10U 25V	30¢	28¢
RE-6075	10U 63V	35¢	33¢
RE-6080	22U 50V	35¢	34¢
RE-6090	25U 25V	30¢	28¢
RE-6095	33U 25V	35¢	33¢
RE-6100	47U 16V	32¢	30¢
RE-6110	47U 25V	35¢	33¢
RE-6122	47U 63V	35¢	34¢
RE-6130	100U 16V	35¢	33¢
RE-6140	100U 25V	38¢	36¢
RE-6150	100U 63V	75¢	65¢
RE-6158	220U 16V	45¢	40¢
RE-6160	220U 25V	55¢	50¢
RE-6180	220U 50V	85¢	80¢
RE-6188	330U 16V	65¢	55¢
RE-6190	330U 25V	78¢	72¢
RE-6192	330U 63V	\$1.20	\$1.10
RE-6194	470U 16V	80¢	55¢
RE-6195	470U 25V	78¢	72¢
RE-6210	470U 63V	\$1.50	\$1.40
RE-6220	1000U 16V	\$1.00	90¢
RE-6230	1000U 25V	\$1.25	\$1.15
RE-6236	1000U 63V	\$1.95	\$1.85
RE-6240	2500U 25V	\$1.85	\$1.75
RE-6242	3300U 25V	\$3.00	\$2.50
RE-6243	4700U 16V	\$2.50	\$2.00

## Unbelievable Electrolytic Buy

Through Jaycar's surplus stock buying scheme, we have purchased a substantial quantity of an electro that would normally be out of reach of the hobbyists pocket. This electro is made in Germany by ROEDERSTEINI!

**6,800uF 63V LONG LIFE**  
**ONLY \$7.50!!**

That's right ROEDERSTEINI brand long life, high ripple current etched electrodes, screw terminals - all class! And at a price below "Taiwanese". These are absolutely fantastic for power supplies for high power amps, etc.

Electrical to DIN 41332  
Tolerance - 10% +50%  
Dimensions 50(D) x 80(H)  
Terminal M5 screw

### QUANTITY DISCOUNTS

1 - 5 \$7.50  
6 - 10 \$7.00  
11 - 24 \$6.50  
25 - 99 \$6.00  
100+ \$5.75

Cat. RN-6712  
**\$7.50**



## Electrolytic Pack

55 quality mostly RB type electrolytics supplied. Values range from 1uF to 470uF. Voltages from 16 to 63.

Cat. RE-6250

**PACK OF 55**

**10+ \$5.85**

**\$6.50**

## RG Chassis Mount

Cat. No.	Type	1-9	10+
RU-6708	4000uF 75V	\$13.50	\$12.50
RU-6710	8000uF 75V	\$17.75	\$17.25

Size RU-6708 47 x 34mm

Size RU-6710 58 x 34mm

Supplied with mounting bracket



## RP Electrolytics

Cat. No.	Type	1-9	10+
RU-6706	2500uF 80V	\$ 8.50	\$ 8.10
RU-6709	5000uF 40V	\$ 9.50	\$ 8.75
RU-6720	10000uF 40V	\$11.50	\$11.00

PC board mount with orientation/support pin

Size RU-6706 55 x 30mm

Size RU-6709 42 x 26mm

Size RU-6720 43 x 30mm



## Hi Quality RP Electrolytics (PC Mount)

A range of three Japanese made Hi quality RP capacitors with PC pin style terminals. These prices represent a considerable saving on normal prices.

**2500uF 35V 30(H) x 22(W)mm**

Cat. RE-6241

1-9 \$2.50 10+ \$2.00

**4700uF 35V 32(H) x 30(W)mm**

Cat. RE-6244

1-9 \$5.75 10+ \$5.00

**15,000uF 16V 32(H) x 35(W)mm**

Cat. RE-6249

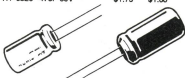
1-9 \$3.00 10+ \$2.50

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## Bi-Polar RB Electrolytic

Cat. No.	Type	1-9	10+
RY-6802	1.0uF 50V	70¢	65¢
RY-6804	2.2uF 50V	70¢	65¢
RY-6805	3.3uF 50V	70¢	65¢
RY-6806	4.7uF 50V	70¢	65¢
RY-6808	6.8uF 50V	90¢	80¢
RY-6810	10uF 50V	90¢	80¢
RY-6816	22uF 50V	\$1.20	\$1.10
RY-6820	47uF 50V	\$1.75	\$1.60





## 100 Volt Greencaps

### Metallised Polyester

	1-9	10+
Cat. RG-5010	0.001uF 1Nf	25c 22c
Cat. RG-5012	0.002uF 1N2	25c 22c
Cat. RG-5015	0.005uF 1N5	25c 22c
Cat. RG-5018	0.018uF 1N8	25c 22c
Cat. RG-5022	0.022uF 2N2	25c 22c
Cat. RG-5027	0.027uF 2N7	25c 22c
Cat. RG-5033	0.033uF 3N3	25c 22c
Cat. RG-5039	0.039uF 3N9	25c 22c
Cat. RG-5047	0.047uF 4N7	25c 22c
Cat. RG-5050	0.050uF 5N0	25c 22c
Cat. RG-5055	0.055uF 5N5	25c 22c
Cat. RG-5060	0.060uF 6N0	25c 22c
Cat. RG-5065	0.065uF 6N5	25c 22c
Cat. RG-5070	0.070uF 7N0	25c 22c
Cat. RG-5075	0.075uF 7N5	25c 22c
Cat. RG-5080	0.080uF 8N0	25c 22c
Cat. RG-5085	0.085uF 8N5	25c 22c
Cat. RG-5090	0.090uF 9N0	25c 22c
Cat. RG-5095	0.095uF 9N5	25c 22c
Cat. RG-5100	0.100uF 10N0	25c 22c
Cat. RG-5105	0.105uF 10N5	25c 22c
Cat. RG-5110	0.110uF 11N0	25c 22c
Cat. RG-5115	0.115uF 11N5	25c 22c
Cat. RG-5120	0.120uF 12N0	25c 22c
Cat. RG-5125	0.125uF 12N5	25c 22c
Cat. RG-5130	0.130uF 13N0	25c 22c
Cat. RG-5135	0.135uF 13N5	25c 22c
Cat. RG-5140	0.140uF 14N0	25c 22c
Cat. RG-5145	0.145uF 14N5	25c 22c
Cat. RG-5150	0.150uF 15N0	25c 22c
Cat. RG-5155	0.155uF 15N5	25c 22c
Cat. RG-5160	0.160uF 16N0	25c 22c
Cat. RG-5165	0.165uF 16N5	25c 22c
Cat. RG-5170	0.170uF 17N0	25c 22c
Cat. RG-5175	0.175uF 17N5	25c 22c
Cat. RG-5180	0.180uF 18N0	25c 22c
Cat. RG-5185	0.185uF 18N5	25c 22c
Cat. RG-5190	0.190uF 19N0	25c 22c
Cat. RG-5195	0.195uF 19N5	25c 22c

## Mixed Capacitor Pack

Don't miss this bargain! This pack contains approximately 150 assorted capacitors. Not junk values, most are normal stock lines. Here's what you get!

RT Electro	1uF, 4.7uF, 25uF, 100uF, 220uF, 470uF, most 63V, 10,000uF 16V
RB Electro	1uF, 2.2uF, 25uF, 47uF
Greenpac	100V 0.0022uF, 0.01uF, 0.22uF, 1uF
Greenpac	630V 0.022uF, 0.1uF
Ceramic	4.7pF, 47pF, 220pF, 470pF, 0.022uF
Polystyrene	220pF, 820pF, 2200pF
1kV Ceramic	330pF, 470pF, 680pF
	PLUS LOTS MORE

## 150 PRIME SPEC CAPACITORS FOR \$10.00

That's only 6.6 cents each!!  
SAVE 84%

Cat. RE-6260  
At our current prices these caps are worth \$61.00  
\*We reserve the right to make changes to this pack if stock shortages occur.



## Mixed Electrolytic Capacitor Pack

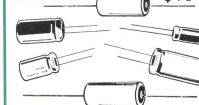
Another absolute bargain. This pack contains approximately 80 assorted RB/RT style electrolytics. Most are standard stock lines. Here is what a typical pack contains.

UF VALUES	
1, 2, 2, 10, 22, 47, 100, 150, 220, 470, 680, 1000, 10,000	
VOLTAGES	
6.3, 10, 16, 25, 35, 40, 50, 63, 250	

A great asset for your parts bin

## OVER 80 CAPACITORS FOR \$10

That's only 12.5c each. Our cheapest stock electrolytic costs 29c, and some supplied in this pack cost as much as \$3 each. We reserve the right to make changes to this pack if stock shortages occur.  
Cat. RE-6280



## Precision Capacitor Pack

### 1 & 2%

Stock up now! These are normally \$3 to \$4 each. Values range from 220pF to 0.22uF. We supply two of each value up to 7 different values. Most are 1%, with some 2%.

### PACK OF 20 CAPACITORS

Cat. RG-5198

**\$12.50**

## Super Capacitor

Cat. RU-6700

0.047F 5 Volt

**\$3.75**

10 up \$3.50 each



## Mains 250V AC Capacitors

Cat. No	Type	1-9	10+
RG-5250	0.01uF	90c	85c
RG-5251	0.022uF	90c	85c
RG-5252	0.033uF	\$1.00	90c
RG-5253	0.047uF	\$1.20	\$1.00
RG-5254	0.1uF	\$1.50	\$1.25
RG-5256	0.22uF	\$1.95	\$1.75
RG-5257	0.47uF	\$2.75	\$2.50



## Crossover Capacitors

We have a small quantity of capacitors suitable for crossovers. They are yellow Polycarbonate types, which are extremely hard to find these days.

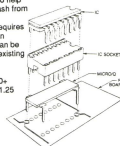
Cat.	RG-5183	4.7uF 250V	\$5.50	\$5.00
Cat.	RG-5185	5.6uF 100V	\$5.50	\$5.00

## 14 Pin Dual In-Line Decoupling Capacitor

This is a 0.02uF very low inductance capacitor designed to mount OVER or UNDER an IC to help decouple noise hash from supply lines.

The "MICRO Q" requires no P.C.B. redesign whatsoever and can be retrofitted OVER existing IC's.

Cat.	RG-5450	1-9	10+
		\$1.50	\$1.25



## 630 Volt Greencap

### Metallised Polyester

	1-9	10+
Cat. RG-5201	0.01uF 10N	50c 45c
Cat. RG-5202	0.022uF 22N	60c 55c
Cat. RG-5203	0.033uF 33N	95c 90c
Cat. RG-5205	0.047uF 47N	95c 90c
Cat. RG-5210	0.1uF 100N	\$1.40 \$1.30
Cat. RG-5222	0.22uF 220N	\$1.60 \$1.50
Cat. RG-5233	0.33uF 330N	\$2.00 \$1.80
Cat. RG-5247	0.47uF 470N	\$2.00 \$1.80



## Greenpac Pack

60 top quality prime spec greencaps supplied. From 0.001uF to 0.22uF, all 100V  
Cat. RG-5199

**\$7.95**

60 in PACK 10+ \$7.50



MELBOURNE - CITY 03 663 2030

## 50 Volt Ceramic NPO 10%

Cat. No	Type	Cat. No	Type
RC-5300	1pF	RC-5324	100pF
RC-5301	1.2pF	RC-5325	120pF
RC-5302	1.5pF	RC-5326	150pF
RC-5303	1.8pF	RC-5327	180pF
RC-5304	2.2pF	RC-5328	220pF
RC-5305	2.7pF	RC-5329	270pF
RC-5306	3.3pF	RC-5330	330pF
RC-5307	3.9pF	RC-5331	390pF
RC-5308	4.7pF	RC-5332	470pF
RC-5309	5.6pF	RC-5333	560pF
RC-5310	6.8pF	RC-5334	680pF
RC-5311	8.2pF	RC-5335	820pF
RC-5312	10pF	RC-5336	1000pF
RC-5313	12pF	RC-5340	2200pF
RC-5314	15pF	RC-5342	3300pF
RC-5315	18pF	RC-5344	4700pF
RC-5316	22pF	RC-5345	5600pF
RC-5317	27pF	RC-5346	6800pF
RC-5318	33pF	RC-5347	8200pF
RC-5319	39pF	RC-5348	0.01uF
RC-5320	47pF	RC-5352	0.022uF
RC-5321	56pF	RC-5354	0.033uF
RC-5322	68pF	RC-5358	0.047uF
RC-5323	82pF		



**ALL 18¢ ea 10 or more 15¢ ea**

## 50 Volt Ceramic 10%

Cat. No	Type	1-9	10+
RC-5360	0.1uF 100N	22¢	19¢
RC-5364	0.22uF 220N	25¢	22¢
RC-5367	0.39uF 390N	40¢	35¢
RC-5368	0.47uF 470N	40¢	35¢



## 3kV Ceramic

Cat. No	Type	1-9	10+
RC-5380	0.01uF	\$1.95	\$1.80

## Ceramic Pack

60 top quality prime spec 50V working ceramics. Values from 10pF to 0.1uF

Cat. RC-5399

PACK OF 60

**\$5.95**



## Ceramic Filters

Cat. No	Type	1-9	10+
RC-5400	CSA5 06MTCS		
	300K resonator	\$3.95	
RC-5402	SFD455D (5 legs)	\$2.95	\$2.75
RC-5403	BFB455 (2 legs)	\$1.50	\$1.00



## Blue Chip Monolithic

Cat. No	Type	1-9	10+
RC-5480	0.01uF	20¢	18¢
RC-5490	0.1uF	25¢	20¢
BUY IN BULK AND SAVE			
0.01uF Cat. RC-5495	PACK OF 100	\$12.50	
0.1uF Cat. RC-5496	PACK OF 100	\$16.50	



## Polystyrene

Also known as "Styroseals"

Cat. No	Type	1-9	10+
RS-5512	15pF	90¢	80¢
RS-5514	22pF	90¢	80¢
RS-5520	33pF	90¢	80¢
RS-5522	39pF	90¢	80¢
RS-5524	47pF	90¢	80¢
RS-5526	56pF	90¢	80¢
RS-5528	68pF	90¢	80¢
RS-5530	82pF	90¢	80¢
RS-5532	100pF	90¢	80¢
RS-5534	120pF	90¢	80¢
RS-5536	150pF	90¢	80¢
RS-5538	180pF	90¢	80¢
RS-5540	220pF	90¢	80¢
RS-5542	270pF	90¢	80¢
RS-5544	330pF	90¢	80¢
RS-5546	390pF	90¢	80¢
RS-5548	470pF	90¢	80¢
RS-5550	560pF	90¢	80¢
RS-5552	680pF	90¢	80¢
RS-5554	820pF	90¢	80¢
RS-5556	1000pF	90¢	80¢
RS-5560	1500pF	\$1.00	90¢
RS-5562	2200pF	\$1.00	90¢
RS-5564	3300pF	\$1.20	\$1.00
RS-5568	5600pF	\$1.20	\$1.00

We buy our Polystyrene capacitors from several sources. The minimum voltage of any "styro" is 50 volts and maybe as high as 630 volts., depending on capacitance value. We cannot guarantee to supply higher than 50 volts however.

## Tag Tantalums

Cat. No	Type	1-9	10+
RZ-6620	0.1uF 35V	70¢	65¢
RZ-6622	0.22uF 35V	70¢	65¢
RZ-6624	0.33uF 35V	70¢	65¢
RZ-6626	0.47uF 35V	70¢	65¢
RZ-6628	1uF 35V	70¢	65¢
RZ-6630	1.5uF 35V	70¢	65¢
RZ-6632	2.2uF 35V	70¢	65¢
RZ-6634	3.3uF 35V	75¢	70¢
RZ-6640	4.7uF 35V	95¢	85¢
RZ-6645	6.8uF 35V	95¢	85¢
RZ-6650	10uF 25V	\$1.10	\$1.00
RZ-6655	10uF 35V	\$1.50	\$1.30
RZ-6657	15uF 16V	95¢	85¢
RZ-6658	22uF 16V	\$1.25	\$1.10
RZ-6665	33uF 16V	\$1.25	\$1.10
RZ-6670	47uF 16V	\$1.25	\$1.10
RZ-6675	100uF 3V	\$1.00	90¢



## Hi Quality Tantalums

We have available some super high quality tantalums. They are KEMET brand telecommunications military spec type and are RT style. The leads are very long and they can be mounted upright. These capacitors normally sell for between \$5 and \$7 each. We can offer these at TAG tantalum prices while stocks last.

Cat. No	Type	1-9	10+
RZ-6621	0.1uF 35V	50¢	40¢
RZ-6625	0.33uF 35V	50¢	40¢
RZ-6627	0.88uF 35V	50¢	40¢
RZ-6646	6.8uF 35V	65¢	50¢
RZ-6656	10uF 35V	75¢	60¢
RZ-6680	15uF 20V	75¢	60¢
RZ-6681	22uF 35V	85¢	70¢
RZ-6682	47uF 20V	95¢	80¢



## Horizontal Trimmers

Cat. No	Type	1-9	10+
RV-5702	2.0 - 70pF BLUE	\$1.95	\$1.80
RV-5704	5.2 - 30pF GREEN	\$1.95	\$1.80
RV-5706	6.8 - 45pF YELLOW	\$1.95	\$1.80
RV-5708	9.8 - 60pF BROWN	\$1.95	\$1.80
RV-5722	4 - 20pF	\$1.40	\$1.30
RV-5738	0 - 100pF Porcelain	\$4.95	\$4.50
RV-5743	0 - 120pF Compression	\$1.95	\$1.75
RV-5744	5 - 50pF Compression	\$1.50	\$1.00



Compression

## Trimmer Capacitor

Cat. No	Type	1-9	10+
---------	------	-----	-----

RV-5726 440pF 80832409

\$1.25 \$1.10

FROM PHILIPS



## Mini Tuning Capacitor

Cat. No	Type	1-9	10+
RV-5740	0 - 160 pF metal tuning gap	\$1.95	\$1.80

1-9 \$5.50 10+ \$5.20



## Thermistor

NTC TYPE - 470 OHMS  
Cat. RN-3450

**50¢**  
10 up 45¢



## TURN YOUR SURPLUS STOCK INTO CASH!!

Jaycar will purchase your surplus stocks of components and equipment. We are continually on the lookout for sources of prime quality merchandise.

**CALL GARY JOHNSTON  
OR BRUCE ROUTLEY  
NOW ON (02) 747 2022**

# Transistors

Type	Mat Pol	Case	Diss @25C	Vcb	Ic	Hfe	Hfe Bias	1-9	10+
Cat. ZT-2040	AC126 (AC125)	PNP	TO-18 150mW	32V	500mA	90		\$1.20	\$1.00
Cat. ZT-2068	AF117	PS	TO-7 80mW	32V	100mA	50	1mA	\$0.50	\$0.45
Cat. ZT-2110	BC327	PS	TO-92 500mW	50V	800mA	100	100mA	\$0.30	\$0.25
Cat. ZT-2112	BC328	PS	TO-92 500mW	30V	800mA	83	100mA	\$0.30	\$0.25
Cat. ZT-2115	BC337	NS	TO-92 500mW	50V	800mA	100	100mA	\$0.30	\$0.25
Cat. ZT-2116	BC338	NS	TO-92 500mW	30V	800mA	100	100mA	\$0.30	\$0.25
Cat. ZT-2150	BC548	NS	TO-92 300mW	50V	100mA	125	2mA	\$0.35	\$0.30
Cat. ZT-2152	BC547	NS	TO-92 300mW	50V	100mA	110	2mA	\$0.15	\$0.12
Cat. ZT-2154	BC548	NS	TO-92 300mW	30V	100mA	110	2mA	\$0.15	\$0.12
Cat. ZT-2156	BC548	NS	TO-92 300mW	30V	100mA	110	2mA	\$0.15	\$0.12
Cat. ZT-2158	BC549C	NS	TO-92 300mW	30V	100mA	100	2mA	\$0.35	\$0.30
Cat. ZT-2160	BC560	PS	TO-92 300mW	50V	100mA	240	2mA	\$0.65	\$0.60
Cat. ZT-2162	BC560	PS	TO-92 300mW	80V	100mA	75/450	2mA	\$0.65	\$0.60
Cat. ZT-2164	BC567	PS	TO-92 300mW	50V	200mA	75	2mA	\$0.18	\$0.15
Cat. ZT-2166	BC558	PS	TO-92 300mW	30V	100mA	74/475	2mA	\$0.18	\$0.15
Cat. ZT-2168	BC559	PS	TO-92 300mW	30V	200mA	125	2mA	\$0.18	\$0.15
Cat. ZT-2179	BC595	PS	TO-92 800mW	80V	1A	40	150mA	\$0.70	\$0.65
Cat. ZT-2180	BC640	PS	TO-92 800mW	80V	1A	40	150mA	\$0.70	\$0.65
Cat. ZT-2185	BCY71	PS	TO-18 350mW	45V	200mA	100	10mA	\$0.95	\$0.85
Cat. ZT-2187	BD135	NPN 40V version of BD139						\$0.79	\$0.70
Cat. ZT-2188	BD136	PNP 40V version of BD139						\$0.95	\$0.90
Cat. ZT-2189	BD139	PS TO-126 6.5W	80V	1A	40/160	150mA		\$0.79	\$0.70
Cat. ZT-2190	BD140	PS TO-126 6.5W	80V	1A	40/250	150mA		\$0.95	\$0.90
Cat. ZT-2192	BD682/BD262 & BD680	PS TO-126 36W	100V	4A	750	1.5A		\$1.80	\$1.62
Cat. ZT-2193	BD263/BC787T & BD679	NS TO-126 36W	100V	4A	750	1.5A		\$1.80	\$1.62
Cat. ZT-2198	BD649	NPN	TO-126 36W	100V	8A	750	1.5A	\$1.80	\$1.62
Cat. ZT-2199	BD650	PNP	TO-126 36W	100V	8A	750	1.5A	\$1.80	\$1.62
Cat. ZT-2205	BF494	NS TO-92 300mW	90V	30mA	10	3mA		\$1.95	\$1.70
Cat. ZT-2209	BF499	NS TO-126 1.8W	250V	200mA	50	25mA		\$1.50	\$1.40
Cat. ZT-2210	BF470	NS TO-126 1.8W	250V	200mA	50	25mA		\$1.50	\$1.40
Cat. ZT-2215	BF494	NS TO-92 300mW	90V	30mA	10	3mA		\$1.95	\$1.70
Cat. ZT-2220	BUX70	NS TO-3 100W	800V	10A	15	1.2A		\$8.50	\$9.00
Cat. ZT-2225	BJ139	SIPMOS Power	TO-3 250W	140V	20A	25	5A	\$9.50	\$9.00
Cat. ZT-2230	MJ15003	PS TO-3 250W	140V	20A	25	5A		\$9.50	\$9.00
Cat. ZT-2231	MJ15004	PS TO-3 150W	100V	15A	5	10A		\$2.95	\$2.80
Cat. ZT-2235	MJ2955	NS TO-126 20W	300V	500mA	30/240	50mA		\$2.35	\$2.20
Cat. ZT-2255	MJ340	NS TO-126 20W	300V	500mA	30/240	50mA		\$2.35	\$2.20
Cat. ZT-2260	MJ350	PS TO-220 90W	70V	10A	20/70	4A		\$1.95	\$1.80
Cat. ZT-2275	MJ355	NS TO-220 90W	70V	10A	20/70	4A		\$1.95	\$1.80
Cat. ZT-2280	MJ3505	NS TO-220 90W	70V	10A	20/70	4A		\$1.95	\$1.80
Cat. ZT-2281	OC977	MATCHED PAIR WITH OC932						\$0.50	\$0.40
Cat. ZT-2282	OC932	MATCHED PAIR WITH OC977						\$0.50	\$0.40
Cat. ZT-2285	TP127	PS TO-220 2W	40V	3A	20/100	1A		\$1.20	\$1.10
Cat. ZT-2290	TP132	NS TO-220 2W	40V	3A	20/100	1A		\$1.20	\$1.10
Cat. ZT-2292	TP122	NPN TO-220 2W	100V	200VA				\$1.75	\$1.60
Cat. ZS-2294	VN84F	PNP 60V 600mA (BC557)						\$1.95	\$1.85
Cat. ZT-2295	2N2907	NS TO-92 300mW	60V	800mA	100	150mA		\$1.95	\$1.75
Cat. ZT-2298	2N2922A	NS TO-92 1W	60V	700mA	50	150mA		\$2.25	\$2.00
Cat. ZT-2299	2N3053	NS TO-3 115W	100V	15A	20/70	4A		\$5.50	\$5.25
Cat. ZT-2300	2N3055	NS TO-3 115W	160V	10A	20/70	3A		\$5.50	\$5.25
Cat. ZT-2305	2N3442	NS TO-3 117W	30V	50mA	70	0.1mA		\$0.95	\$0.85
Cat. ZT-2309	2N3565	NS TO-92 200mW	40V	200mA	150	10mA		\$0.18	\$0.12
Cat. ZT-2310	2N3566	NS TO-105 300mW	30V	50mA	100	150mA		\$0.68	\$0.60
Cat. ZT-2314	PN3568	NPN 60V 500mA						\$0.35	\$0.28
Cat. ZT-2315	2N3569	PS TO-92 300mW	80V	500mA	30	50mA		\$0.45	\$0.40
Cat. ZT-2320	2N3638	NS TO-92 350mW	60V	500mA	100	150mA		\$0.65	\$0.55
Cat. ZT-2325	2N3643	PS TO-92 300mW	60V	500mA	115	50mA		\$0.85	\$0.75
Cat. ZT-2330	2N3645	PS TO-92 150W	50V	30A	15/60	10A		\$1.45	\$1.40
Cat. ZT-2333	2N3771	NS TO-92 200mW	40V	100mA	250m1	1mA		\$0.75	\$0.65
Cat. ZT-2338	2N4250	PS TO-92 200mW	12V	50mA	30/120	10mA		\$1.95	\$1.75
Cat. ZT-2340	2N4258	PS TO-92 200mW						\$0.60	\$0.45
Cat. ZT-2360	2N5416	PNP TO-5	300V	1A				\$0.30	\$0.20
Cat. ZT-2370	2N5400	PNP TO-92	120V	600mA				\$1.00	\$0.80
Cat. ZT-2398	2N8211	PNP TO-6	275V	2A				\$2.95	\$2.75
Cat. ZT-2400	2SC2545	NS TO-92							

TO3 Package Power Transistors



Viewed from below

B - Base  
C - Collector  
E - Emitter

BUX70  
MJ15003  
MJ15004



Viewed from below

B - Base  
C - Collector  
E - Emitter

BC547 BC557  
BC548 BC558  
BC549 BC559



Viewed from below

B - Base  
C - Collector  
E - Emitter

BD139  
BD140  
BD136  
BD138



Viewed from below

B - Base  
C - Collector  
E - Emitter

BC547 BC557  
BC548 BC558  
BC549 BC559



Viewed from below

B - Base  
C - Collector  
E - Emitter

BC547 BC557  
BC548 BC558  
BC549 BC559



Viewed from below

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C - Collector  
E - Emitter

BC547 BC557  
BC548 BC558  
BC549 BC559



Viewed from below

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BC547 BC557  
BC548 BC558  
BC549 BC559



Viewed from below

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BC547 BC557  
BC548 BC558  
BC549 BC559



Viewed from below

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E - Emitter

BC547 BC557  
BC548 BC558  
BC549 BC559



Viewed from below

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C - Collector  
E - Emitter

BC547 BC557  
BC548 BC558  
BC549 BC559



Viewed from below

B - Base  
C - Collector  
E - Emitter

BC547 BC557  
BC548 BC558  
BC549 BC559

## SCR's

Cat. No	Type	Volt/Amp	1-9	10+
Cat. ZK-7006	CI08D1	400V 4A	\$1.95	\$1.75
Cat. ZK-7008	C103B	200V 800mA	\$1.65	\$1.45
Cat. ZK-7010	CI06Y1	30V 4A	\$1.20	\$1.10
Cat. ZK-7012	C122E	600V 8A	\$3.50	\$3.25



K - Cathode  
A - Anode  
G - Gate

## TRIAC's

Cat. No	Type	Volt/Amp	1-9	10+
Cat. ZK-7141	SC141D	400V 6A	\$1.85	\$1.70
Cat. ZK-7145	SC151D	400V 15A	\$2.50	\$2.35
Cat. ZK-7147	TAG225	400V 8A	\$2.25	\$2.10



T1 - Terminal 1  
T2 - Terminal 2  
G - Gate

# Multi-88 replacement Common Transistors

Jaycar have available two transistors which will replace a multitude of common hard to get devices.

**PN100** is NPN general purpose medium power amp and switch with continuous collector current up to 500mA.

**PN200** is PNP general purpose amplifier at collector currents to 1A. Both are TO-18 plastic package.

**PN100 replaces** PN2221, PN2222, PN2222A, PN3565, PN3568, PN3569, PN3643, PN5133, 2N2219A, 2N2222A, 2N3414, 2N3415, 2N3416, 2N3417, 2N3700, 2N3704, 2N3904, 2N4123, 2N4124, 2N4401, 2N5088 and 2N5210.

Cat. ZT-2283

**25c ea 10 + 22c ea**

**PN200 replaces** PN2907, PN2907A, PN3638, PN3638A, PN3640, PN3644, PN4121, PN4143, PN4245, PN4249, PN4250, PN4355, PN4916, PN4917, PN5910, 2N2905A, 2N3467, 2N3702, 2N3906, 2N4125, 2N4126, 2N4291, 2N4402, 2N4403, 2N5086, 2N5087, 2N5447

Cat. ZT-2284

**25c ea 10 + 22c ea**

**FETs, UJT's**

**25J49** P channel Mosfet Cat. ZT-2449 \$8.95 \$7.95

**25J56** P channel Mosfet Cat. ZT-2450 \$22.95 \$21.50

**25K134** N channel Power Mosfet Cat. ZT-2454 \$8.95 \$7.95

**25K176** N Mosfet Cat. ZT-2455 \$19.50 \$18.50

**MPF102** N channel JFET Cat. ZT-2282 \$1.95 \$1.25

**MPF105/2N5459** N channel JFET Cat. ZT-2285 95c 85c

**MPF106/2N5485** N channel JFET Cat. ZT-2286 \$1.40 \$1.30

**2N5454** N channel JFET Cat. ZT-2360 \$1.95 \$1.75

**2N5484** N channel JFET Cat. ZT-2375 \$1.20 \$1.10

**MPF151** N channel Dual Gate Mosfet Cat. ZT-2227 \$4.20 \$3.85

**2N2646** Unijunction Transistor Cat. ZT-2297 \$1.40 \$1.26

**2N6027** Programmable Unijunction Cat. ZT-2297 \$1.25 \$1.25

**25K146** Dual N channel JFet Cat. ZT-2228 \$29.50 \$27.50

**Small Signal FETs**

G - Gate  
S - Source  
D - Drain

**2N5457** 2N5458 2N5459 2N5484 2N5485 MPF106

**DIAC's**

Cat. No Type 1-9 10+

Cat. ZK-7180 S71A \$1.25 \$1.15

Cat. ZK-7192 S12 \$1.25 \$1.15

COUNTRY ORDERS 008 022 888

## Light Emitting Diodes

Cat. No	Size	Colour	Lens Colour	Brightness (mCd)	Absolute Maximum Ratings				Electro-Optical Characteristics				Price	10 up
					$\Delta\lambda$ (nm)	Pd (mw)	I(fmA)	Peak (fmA)	V(fV) Min.	Typ.	Max.	Rec I(fmA)		
ZD-1740	3mm	Red	Red	0.5	40	110	40	200	1.5	1.7	2.0	10-20	28e	25e
ZD-1745	3mm	Green	Green	3.5	30	100	30	160	1.7	2.1	2.8	10-20	32e	28e
ZD-1750	3mm	Yellow	Yellow	2.5	35	85	20	160	1.7	2.0	2.8	10-20	32e	28e
ZD-1752	3mm	Red	Water Clear	120	20	110	40	200	1.5	1.7	2.0	10-20	99e	90e
ZD-1710	5mm	Red	Red	0.9	40	110	40	200	1.5	1.7	2.0	10-20	25e	22e
ZD-1715	5mm	Green	Green	25	30	100	30	160	1.7	2.1	2.8	10-20	35e	30e
ZD-1720	5mm	Yellow	Yellow	2.5	35	85	20	160	1.7	2.0	2.8	10-20	35e	30e
ZD-1725	5mm	Orange	Orange	3.5	45	100	30	160	1.7	2.0	2.8	10-20	35e	30e
ZD-1700	5mm	Red	Water Clear	300	20	110	40	200	1.5	1.7	2.4	10-20	79e	70e
ZD-1792	5mm	Red	Water Clear	500	20	110	40	200	1.5	1.7	2.4	10-20	\$2.50	\$2.30
ZD-1793	5mm	Red	Water Clear	1000	20	110	40	200	1.5	1.7	2.4	10-20	\$4.95	\$4.50
ZD-1794	5mm	Green	Water Clear	80		125	50	50		2.1	2.5	20	\$1.50	\$1.40
ZD-1795	5mm	Yellow	Water Clear	160		125	50	50		2.1	2.5	20	\$1.90	\$1.80
ZD-1735	5mm	Tri-Colour	Water Clear											
ZD-1780	5mm PCB	Red	Red	1.6	90	45	15	50	1.7	2.1	2.8	5-10	48e	42e
ZD-1781	5mm PCB	Green	Green	5.0	30	100	30	160	1.7	2.1	2.8	10-20	48e	42e
ZD-1782	5mm PCB	Yellow	Yellow	5.0	35	85	20	160	1.7	2.0	2.8	10-20	48e	42e
ZD-1783	5mm PCB	Orange	Orange	5.0	35	100	30	160	1.7	2.0	2.8	10-20	48e	42e
ZD-1956	10mm	Red	Red	3.8	90	45	15	50	1.7	2.1	2.8	10-20	\$1.50	\$1.30
ZD-1957	10mm	Green	Green	15	30	100	30	160	1.7	2.1	2.8	10-20	\$1.50	\$1.30
ZD-1958	10mm	Yellow	Yellow	13	35	85	20	160	1.7	2.0	2.8	10-20	\$1.50	\$1.30
ZD-1959	10mm	Orange	Orange	15	45	100	30	160	1.7	2.0	2.8	10-20	\$1.50	\$1.30
ZD-1760	5x2mm	Red	Red	0.5	90	45	15	45	1.7	2.1	2.8	5-10	40e	35e
ZD-1765	5x2mm	Green	Green	1.0	30	100	30	100	1.7	2.1	2.8	10-20	40e	35e
ZD-1770	5x2mm	Yellow	Yellow	1.0	35	85	20	85	1.7	2.0	2.8	10-20	40e	35e

## Flashing LEDs

All 5mm, 3.5 volt operation. Pulse rate 2Hz, 1.2mCd at 3 volts. Available in 3 colours.  
RED Cat. ZD-1730  
GREEN Cat. ZD-1731  
YELLOW Cat. ZD-1732

**\$1.50 ea**

10 or more \$1.35 each



## Infra Red LEDs and Diodes

ZD-1945 CQY89 IR LED

1-9 \$1.85 10+ \$1.75

ZD-1950 BPW50 type IR diode

1-9 \$3.75 10+ \$3.25

ZD-1952 TIL31 Infra Red LED  
TO-18

1-9 \$1.50 10+ \$1.30

ZD-1953 TIL81 NPN Photo  
Transistor TO-18

1-9 \$2.00 10+ \$1.70



## LED Mounting Hardware

## 5mm Clips

Black with interlocking collar.

Cat. HP-1102 packet 20

**\$2.20**

Cat. HP-1103 packet 100

**\$8.95**

## 5mm Bezels

The great new LED Bezels are made of black plastic and are supplied in 2 parts. Simply push part A into the panel (you will need a 10mm hole), then put the LED into part B and insert part B (with LED) into part A for a tight fit. You end up with a very professional LED bezel at about 1/4 the price of chrome ones. ALSO: If you have the need for a hole in a panel up until now it has been extremely hard to disguise it. Simply mount one of these without the LED. Ideal for internal mounted buzzers, lamps, etc.

Cat. HP-1105 packet 10

**\$2.99**

Cat. HP-1106 packet 100

**\$26.95**

## 3mm Clips

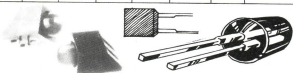
Black, requires a 4mm panel hole. Simply push clip into panel and insert LED.

Cat. HP-1100

**\$2.20 pk 20**

Cat. HP-1101

**\$8.95 pk 100**



## 7 Segment Displays

LT303 Common Cathode

Cat. ZD-1803

LT302 Common Anode

Cat. ZD-1802

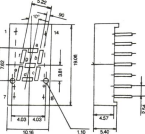
• Peak wavelength 700

• 1V (uCd) 650

• IF mA 10

**\$3.50 ea**

10+ \$3.30 ea



## 7 Segment Displays

FND500/LS543R/S505RHw

Common Cathode

Cat. ZD-1855

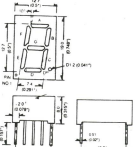
FND507/LS542R/S506RHw

Common Anode

Cat. ZD-1857

**\$2.85 ea**

10+ \$2.65 ea



BRISBANE 07 393 0777



# Low Power Schottky 74LS

Cat. No	Type	Pin	Description
ZS-5001 74LS00	14	Quad 2 input NAND gate	
ZS-5001 74LS01	14	Quad 2 input NAND gate (oc)	
ZS-5002 74LS02	14	Quad 2 input NOR gate	
ZS-5003 74LS03	14	Quad 2 input NAND gate (oc)	
ZS-5004 74LS04	14	Hex inverter	
ZS-5005 74LS05	14	Hex inverter (oc)	
ZS-5006 74LS08	14	Quad 2 input AND gate	
ZS-5008 74LS09	14	Quad 2 input AND gate (oc)	
ZS-5010 74LS10	14	Triple 3 input NAND gate	
ZS-5011 74LS11	14	Triple 3 input AND gate	
ZS-5012 74LS12	14	Triple 3 input NAND gate (oc)	
ZS-5013 74LS13	14	Quad 2 input schmitt trigger NAND gate	
ZS-5014 74LS14	14	Hex schmitt trigger	
ZS-5020 74LS20	14	Quad 4 input NAND gate	
ZS-5021 74LS21	14	Quad 4 input AND gate	
ZS-5027 74LS27	14	Triple 3 input NOR gate	
ZS-5030 74LS30	14	Single 8 input NAND gate	
ZS-5032 74LS32	14	Quad 2 input OR gate	
ZS-5033 74LS33	14	Quad 2 input NOR gate (oc)	
ZS-5042 74LS42	14	1 of 10 decoder	
ZS-5047 74LS47	14	BCD to 7 segment decoder/driver (oc)	
ZS-5048 74LS48	14	BCD to 7 segment decoder/driver (oc)	
ZS-5049 74LS49	14	BCD to 7 segment decoder/driver (oc)	
ZS-5073 74LS73	14	Dual JK flip-flop with clear	
ZS-5074 74LS74	14	Dual DFF + Prst + CLR	
ZS-5075 74LS75	14	4 bit bistable latch	
ZS-5076 74LS76	14	Dual JK flip-flop with preset and clear	
ZS-5078 74LS78	14	Dual JK flip-flop with common clear	
ZS-5083 74LS83	14	4 bit full adder	
ZS-5085 74LS85	14	4 bit magnitude comparator	
ZS-5086 74LS86	14	Quad 2 input exclusive OR gate	
ZS-5090 74LS90	14	Decade counter	
ZS-5092 74LS92	14	Divide by 12 counter	
ZS-5093 74LS93	14	4 bit binary counter	
ZS-5095 74LS95	14	4 bit shift register	
ZS-5102 74LS107	14	Dual JK flip-flop	
ZS-5105 74LS108	14	Dual JK edge triggered flip-flop	
ZS-5112 74LS112	14	Dual JK edge triggered flip-flop	
ZS-5122 74LS122	14	Retriggerable monostable multivibrator	
ZS-5123 74LS123	14	Quad retriggerable monostable with clear	
ZS-5125 74LS125	14	Quad tri-state buffer	
ZS-5126 74LS126	14	Quad tri-state buffer	
ZS-5138 74LS138	14	1 of 8 decoder/demultiplexer	
ZS-5139 74LS139	14	Dual 1 of 4 decoder/demultiplexer	
ZS-5147 74LS147	14	8 input to 3 line priority encoder	
ZS-5148 74LS148	14	8 input to 3 line priority encoder	
ZS-5151 74LS151	14	Single 8 input multiplexer	
ZS-5152 74LS153	14	Dual 4 input multiplexer	
ZS-5156 74LS156	14	Dual 1 of 4 decoder/demultiplexer	
ZS-5157 74LS157	14	Dual 1 of 4 decoder/demultiplexer	
ZS-5157 74LS157	14	Quad 2 input 1 multiplexer (non-invert)	
ZS-5158 74LS158	14	Quad 2 input multiplexer (invert)	
ZS-5160 74LS160	14	BCD decade counter (async. reset)	
ZS-5161 74LS161	14	4 bit binary counter (sync. reset)	
ZS-5162 74LS162	14	BCD decade counter (sync. reset)	
ZS-5163 74LS163	14	4 bit binary counter (sync. reset)	
ZS-5164 74LS164	14	8 bit shift register (ser. input, out)	
ZS-5165 74LS165	14	8 bit shift register (par. input, out)	
ZS-5166 74LS166	14	8 bit shift register (par. input, out)	
ZS-5173 74LS173	14	4 bit tri-state D register	
ZS-5174 74LS174	14	Hex D flip-flop with clear	
ZS-5175 74LS175	14	Quad D flip-flop with clear	
ZS-5190 74LS190	14	Up/down decade counter	
ZS-5191 74LS191	14	Up/down binary counter	
ZS-5192 74LS192	14	Up/down decade counter with dual clock	
ZS-5193 74LS193	14	Up/down binary counter with dual clock	
ZS-5194 74LS194	14	4 bit bi-directional shift register	
ZS-5195 74LS195	14	4 bit parallel access shift register	
ZS-5196 74LS196	14	Pre-settable decade counter	
ZS-5221 74LS221	14	Dual monostable multivibrator	
ZS-5240 74LS240	14	Octal tri-state buffer (inverting)	
ZS-5241 74LS241	14	Octal tri-state buffer (non-inverting)	
ZS-5243 74LS243	14	Quad Bus Transceivers	
ZS-5244 74LS244	14	Octal tri-state line driver/receiver	
ZS-5245 74LS245	14	Octal tri-state bus transceiver	
ZS-5257 74LS257	14	Quad 2 input tri-state multiplexer	
ZS-5258 74LS258	14	Quad 2 input tri-state multiplexer	
ZS-5259 74LS259	14	8 bit addressable latch	
ZS-5266 74LS266	14	Quad exclusive NOR gate (oc)	
ZS-5273 74LS273	14	Octal flip-flop with clear	
ZS-5352 74LS523	14	Inverting LS353	
ZS-5365 74LS565	14	Hex buffer common enable (non-invert)	
ZS-5366 74LS566	14	Hex buffer common enable (inverting)	
ZS-5367 74LS567	14	Hex buffer 4 bit and 2 bit	
ZS-5368 74LS568	14	Hex inverter 4 bit and 2 bit	
ZS-5373 74LS573	14	Octal transparent tri-state latch	
ZS-5374 74LS574	14	Octal tri-state D flip-flop	
ZS-5393 74LS593	14	Quad 4 bit binary counter	
ZS-5629 74LS629	14	Voltage controlled oscillator	

Replaces 74LS124

# Linear IC

Cat. No	Type	Pin	Description	1-9	10+
ZL-3061 TL061	8	1 x low power JFET op-amp		\$ 2.45	\$2.20
ZL-3062 TL062	8	2 x low power JFET op-amp		\$ 2.95	\$2.65
ZL-3064 TL064/LF444	14	4 x low power JFET op-amp		\$ 5.50	\$5.30
ZL-3071 TL071/LF351	8	1 x low noise JFET op-amp		\$ 1.50	\$1.35
ZL-3072 TL072/LF353	8	2 x low noise JFET op-amp		\$ 2.50	\$2.30
ZL-3074 TL074/LF374	14	4 x low noise JFET op-amp		\$ 5.50	\$5.00
ZL-3075 TL075	14	4 x low noise JFET op-amp		\$ 7.50	\$7.00
ZL-3084 TL084	14	J FET op amp		\$ 3.20	\$3.00
ZL-3301 LM301	8	High performance op-amp		\$ .95	\$ .85
ZL-3307 LM307	8	High performance comparator		\$ 1.50	\$1.40
ZL-3308 LM308	8	Precision op-amp		\$ 2.20	\$2.10
ZL-3311 LM311	8	Voltage comparator		\$ 1.20	\$1.10
ZL-3318 LM318H	8	High performance op-amp		\$ 4.95	\$4.25
ZL-3324 LM324	14	4 x low power op-amp		\$ 1.40	\$1.30
ZL-3326 LM326	14	Dual trac voltage regulator		\$ .95	
ZL-3334 LM334	14	Adjustable current source		\$ 3.75	\$3.45
ZL-3339 LM339	14	4 x low power comparator		\$ 1.20	\$1.10
ZL-3348 LM348	14	Quad 741 Op amp		\$ 1.85	\$ 1.65
ZL-3350 OM350	5	Hybrid amplifier (40-550MHz)		\$19.95	
ZL-3380 LM380	14	Audio power amplifier		\$ 2.85	\$2.60
ZL-3381 LM381M	14	Low noise dual pre-amplifier		\$ 4.75	\$4.50
ZL-3382 LM382	14	Low noise dual pre-amplifier		\$ 3.45	\$2.95
ZL-3386 LM386N-1	8	Low voltage 1 watt amplifier		\$ 2.40	\$1.75
ZL-3393 LM393	8	Low power dual comparator		\$ 1.95	\$1.76
ZL-3394 LM394CH	8	Supermatched transistor pair		\$ 8.95	\$8.50
ZL-3455 LM755S	8	MOS timer		\$ 2.50	\$1.75
ZL-3555 NE555	8	Timer		\$ .70	\$ .55
ZL-3556 NE556	8	Dual timer		\$ 1.45	\$1.25
ZL-3565 LM565	8	PLL		\$ .50	
ZL-3566 NE566	8	Function generator		\$ 3.45	\$3.15
ZL-3567 LM567	8	Phase locked loop (PLL)		\$ 2.40	\$2.10
ZL-3571 NE571	16	Comparator		\$ 6.50	\$6.00
ZL-3572 NE572	16	Stereo compressor IC		\$ .95	
ZL-3709 UA709	8	Op-amp (14 pin)		\$1.25	\$1.05
ZL-3710 VA709HC	8	Tri-amp metal round		\$ .75	\$ .65
ZL-3741 LM741	14	General purpose op-amp		\$ 2.25	\$2.00
ZL-3747 LM747	14	Dual general purpose op-amp		\$ 1.75	\$ .65
ZL-3748 LM748	8	Single Op amp		\$ .50	\$1.30
ZL-3753 LM1458N	8	Dual op-amp		\$ 1.50	\$1.30
ZL-3917 LM2917	14	Frequency to voltage converter		\$ 4.20	\$3.75
ZL-3762 CA3028	8	Oper. transconductance amp		\$ 4.50	\$4.20
ZL-3780 LM3080	8	Oper. transconductance amp		\$ 2.50	\$2.30
ZL-3832 CA3130E	8	Minipid op-amp		\$ 3.50	\$3.25
ZL-3834 CA3100E	8	Wideband op-amp		\$ 4.95	\$4.65
ZL-3840 LM3140	8	Op-amp		\$ 1.95	\$1.85
ZL-3756 MC1496G	10	Modulator		\$ 4.40	
ZL-3900 LM3900	14	Quad op-amp		\$ 1.65	\$1.50
ZL-3909 LM3909	8	LED flasher/oscillator		\$ 3.50	\$3.25
ZL-3911 LM3911	8	Temperature controller		\$ 5.50	\$5.20
ZL-3914 LM3914	18	LED bar/driver (linear)		\$ 6.50	\$5.95
ZL-3915 LM3915	18	LED bar/driver (logarithmic)		\$ 6.50	\$5.95
ZL-3936 LM4136	14	Quad high performance op-amp		\$ 2.75	\$2.50
ZL-3958 LM4558	14	Quad high performance op-amp		\$ 1.50	\$1.35
ZL-3970 LM5534N	8	Low noise op-amp		\$ 1.75	\$2.50
ZL-3971 LM5534N	8	Ultra low noise op-amp		\$ 3.95	\$3.25
ZL-3990 ZN414	3	Low power AM radio chip		\$ 2.75	\$2.50

TTL

Cat. No	Type	Pin	Description	1-9	10+
ZS-5802 7402	14	Quad 2 input NOR gate		\$1.00	90c
ZS-5804 7404	14	Hex inverter		\$1.00	90c
ZS-5806 7406	14	Hex inverter with high voltage AC op		\$1.20	\$1.10
ZS-5807 7407	14	Hex buffer with high voltage AC op		\$1.20	\$1.10
ZS-5821 74121	14	One shot		\$1.50	\$1.40
ZS-5837 7437	14	Quad 2 input NAND buffer		80c	75c
ZS-5854 7454	14	4 wide 2 input NAND-OR INVERT gate		60c	55c
ZS-5875 7475	16	4 bit bistable latch		\$1.50	\$1.40
ZS-5895 7495	14	4 bit left/right shift register		75c	68c
ZS-5896 74196	14	Presettable decade/binary counter		\$2.75	\$2.60
ZS-5950 75451	8	Dual Peripheral Pos & Driver		\$1.00	80c

SPRINGVALE-VIC 03 547 1022

Semiconductors

## CMOS

Part No.	Part	Pins	Description	1-9	10s
ZC-4000	4000	14	Dual 3 input NOR gate + inverter	80¢	75¢
ZC-4001	4001	14	Dual 2 input NOR gate	60¢	55¢
ZC-4002	4002	14	Quad 2 input NOR gate	80¢	75¢
ZC-4008	4008	14	18 state static shift register	\$1.35	\$1.20
ZC-4007	4007	14	Dual complementary pair + inverter	\$1.35	\$1.20
ZC-4008	4008	16	4 bit full adder	\$1.35	\$1.20
ZC-4009	4009	16	Hex buffer (inverting)	\$1.50	\$1.40
ZC-4010	4010	16	Hex buffer (non-inverting)	\$1.50	\$1.40
ZC-4011	4011	14	Quad 2 input NAND gate	60¢	55¢
ZC-4012	4012	14	Dual 4 input NAND gate	\$1.00	90¢
ZC-4013	4013	14	Dual D flip-flop	90¢	81¢
ZC-4014	4014	16	8 stage static shift register	\$1.75	\$1.55
ZC-4015	4015	14	Quad bi-static shift register	\$1.45	\$1.25
ZC-4016	4016	14	Quad bi-lateral switch	\$1.75	\$1.55
ZC-4017	4017	16	Decade counter/divider	\$1.75	\$1.55
ZC-4018	4018	16	Presettable divide by N counter	\$1.95	\$1.75
ZC-4019	4019	16	AND-OR select gate	95¢	85¢
ZC-4020	4020	16	Quad 2 input counter/divider	\$1.75	\$1.55
ZC-4021	4021	16	8 stage static shift register	\$1.95	\$1.85
ZC-4022	4022	16	Divide by 8 counter/divider	\$1.95	\$1.85
ZC-4023	4023	16	Triple 3 input NAND gate	85¢	85¢
ZC-4024	4024	14	7 stage ripple-carry counter/divider	\$1.18	\$1.08
ZC-4025	4025	16	2 input NOR gate	75¢	75¢
ZC-4026	4026	16	Decade counter with 7 segment output	\$3.75	\$3.50
ZC-4027	4027	16	Dual JK flip-flop	\$1.25	\$1.10
ZC-4028	4028	16	BCD to decimal decoder	\$1.95	\$1.85
ZC-4029	4029	16	Presettable binary/divide up/down counter	\$1.85	\$1.75
ZC-4030	4030	14	Quad 2 IP excl. OR gate	75¢	75¢
ZC-4040	4040	14	12 stage ripple-carry binary counter	\$1.65	\$1.50
ZC-4042	4042	14	Quad locked D latch	\$1.20	\$1.10
ZC-4043	4043	14	Monopower phase locked loop (PLL)	\$2.20	\$2.10
ZC-4047	4047	14	Monostable multivibrator	\$1.60	\$1.50
ZC-4049	4049	14	Hex buffer (inverting)	90¢	100¢
ZC-4050	4050	14	Hex buffer (non-inverting)	98¢	92¢
ZC-4051	4051	16	Single 8 channel analog multiplexer	\$1.75	\$1.60
ZC-4052	4052	16	Single 8 channel analog multiplexer	\$1.95	\$1.80
ZC-4053	4053	16	Triplet 2 channel analog multiplexer	\$1.95	\$1.80
ZC-4056	4056	14	Quad bi-lateral switch	\$1.20	\$1.10
ZC-4058	4058	14	Single 8 input NAND gate	80¢	75¢
ZC-4059	4059	14	Hex inverter	95¢	85¢
ZC-4070	4070	14	Quad 2 input exclusive OR gate	95¢	85¢
ZC-4071	4071	14	Quad 2 input OR gate	95¢	85¢
ZC-4073	4073	14	Triple 3 input AND gate	80¢	70¢
ZC-4075	4075	14	Triple 3 input NOR gate	80¢	75¢
ZC-4076	4076	14	Quad 2 input OR gate	\$1.75	\$1.65
ZC-4077	4077	14	Quad 2 input exclusive NOR gate	75¢	75¢
ZC-4078	4078	14	Single 8 input NOR gate	80¢	75¢
ZC-4081	4081	14	Quad 2 input AND gate	75¢	75¢
ZC-4082	4082	14	Quad 2 input AND gate	75¢	75¢
ZC-4093	4093	14	Quad 2 input NAND schmitt trigger	\$1.50	\$1.40
ZC-4426	4426	16	Decade counter with 7 segment output	\$2.90	\$2.70
ZC-4501	4501	16	Triplet gate	\$1.95	\$1.80
ZC-4502	4502	16	Strobed hex inverter	\$1.95	\$1.80
ZC-4503	4503	16	Hex inverting 9 stage buffer	85¢	85¢
ZC-4511	4511	16	BCD to 7 segment decoder/divider	\$2.45	\$2.30
ZC-4512	4512	16	8 channel data selector	\$1.95	\$1.80
ZC-4518	4518	16	Dual BCD up counter	\$2.20	\$2.00
ZC-4520	4520	16	Dual binary up counter	\$2.20	\$2.00
ZC-4526	4526	16	Programmable divide by N counter	\$2.20	\$2.00
ZC-4528	4528	16	Dual monostable multivibrator	\$1.95	\$1.65
ZC-4538	4538	16	Dual precision monostable multivibrator	\$2.65	\$2.50
ZC-4543	4543	16	BCD to 7 segment decoder/divider	\$1.95	\$1.80
ZC-4572	4572	16	Look ahead carry block	\$1.00	\$1.85
ZC-4582	4582	16	Look ahead carry block	\$2.90	\$2.80
ZC-4583	4583	16	Dual schmitt trigger	\$1.50	\$1.25
ZC-4594	4594	14	Hex schmitt trigger	\$4.75	\$4.20
ZC-4801	74HC02	14	Quad 2 input NOR gate	\$1.50	\$1.35
ZC-4900	74C00	14	Quad 2 input NAND gate	\$1.50	\$1.35
ZC-4902	74C02	14	Quad 2 input NOR gate	\$1.50	\$1.35
ZC-4914	74C14	14	Hex schmitt trigger (or 4101 or 4584)	\$1.85	\$1.65
ZC-4922	74C29	16	dual monostable multivibrator	\$3.95	\$3.50
ZC-4922	74C26	16	16 decoder	16¢	16¢
ZC-4926	74C92	16	4 digit counter with 7 segment output	\$17.50	

## CPU Memory

## SPECIAL FUNCTIONS

Cat.	Part	Pin		1-9	10-16
Cat. ZT-8000	280A CPU	40	Central processing unit	\$ 5.95	\$ 5.75
Cat. ZT-8005	280A CTC	28	Clock/timer/control unit	\$ 6.95	\$ 6.50
Cat. ZT-8010	280A PIO	28	Parallel input/output unit	\$ 6.95	\$ 6.75
Cat. ZT-8015	280A SIO	28	Serial input/output unit	\$ 11.95	\$ 11.50
Cat. ZT-8020	280A SIO1	40	Serial input/output unit	\$ 12.95	\$ 12.50
Cat. ZT-8025	280A SIO2	40	Serial input/output unit	\$ 9.95	\$ 9.50
Cat. ZT-8030	2800 DMA	40	Direct memory access unit	\$ 14.95	\$ 14.50
Cat. ZT-8035	2800 DART	40	Dual async. re/tran's	\$ 12.50	\$ 12.00
Cat. ZT-8048	6800	28	8080 CPU	\$ 5.00	\$ 3.00
Cat. ZT-8040	6502	40	Central processing unit	\$ 14.95	
Cat. ZT-8045	6545-1	40	Cathode ray tube cont.	\$ 29.50	
Cat. ZT-8050	6802	40	Central processing unit	\$ 15.95	\$ 13.95
Cat. ZT-8055	6800CE	40	8080 microprocessor	\$ 5.00	\$ 4.00
Cat. ZT-8056	6810	24	A RAM	\$ 2.50	\$ 2.00
Cat. ZT-8061	6821	40	Peripheral interface	\$ 2.00	
Cat. ZT-8063	6845	40	CRT controller	\$ 12.00	
Cat. ZT-8065	6855	24	Asynch. Comm Int'rad	\$ 7.00	
Cat. ZT-8072	CDP182	24	8080 CPU	\$ 11.50	\$ 10.50
Cat. ZT-8080	MC1408L8	16	8 bit D/A conv. (s/m DAC08)	\$ 1.00	\$ .80
Cat. ZT-8082	8T-26A	16	8 bit D/A conv.		
	CM8800A	16	Quad Data Bus	\$ 1.95	\$ 1.50
Cat. ZT-8148	1488	14	RS-485 receiver	\$ 1.50	\$ 1.35
Cat. ZT-8149	1489	14	RS-232C receiver	\$ 1.50	\$ 1.35
Cat. ZT-8155	8255N	40	Parallel peripheral interface	\$ 9.95	\$ 9.50
Cat. ZT-8171	FD1771	40	Floppy diskette cont.	\$ 39.75	\$ 35.00
Cat. ZT-8176	8158	40	Octal buffer	\$ 3.20	\$ 2.90
Cat. ZT-8197	81LS397	20	Octal buffer (invert)	\$ 3.95	\$ 3.50
Cat. ZT-8198	81LS98	20	Octal buffer	\$ 3.90	\$ 3.70
Cat. ZT-8204	11C90	9	TTL differential line		
	SAB708	16		\$ 33.95	
Cat. ZT-8208	9508	16	Binary to Hex 7 seg driver	\$ 2.50	
Cat. ZT-8414	2114-5	18	1x4 to 4 static M 350n	\$ 2.50	\$ 2.25
Cat. ZT-8416	4116	16	16k x 1 dynamic RAM 150nsec	\$ 2.95	\$ 2.45
Cat. ZT-8420	4164	16	64k x 1 dynamic RAM	\$ 2.95	\$ 2.50
Cat. ZT-8421	4164	16	64k x 1 dynamic RAM 150nsec	\$ 3.50	\$ 2.95
Cat. ZT-8430	6116	16	Static CMOS RAM	\$ 3.95	\$ 3.50
Cat. ZT-8435	41256	16	256K RAM 150nsec	\$ 7.50	\$ 5.50
Cat. ZT-8440	6204	28	RAM	\$ 8.95	\$ 8.50
Cat. ZT-8450	2758	24	EPROM	\$ 6.95	\$ 5.50
Cat. ZT-8451	1702	24	EPROM 256 x 8	\$ 11.95	\$ 10.95
Cat. ZT-8454	2716	24	2k x 8 EPROM single 5V	\$ 13.95	\$ 12.95
Cat. ZT-8459	2732A	24	EPROM	\$ 10.95	\$ 9.95
Cat. ZT-8460	2732	24	4k x 8 EPROM single 5V	\$ 10.95	\$ 9.95
Cat. ZT-8462	2716	24	4k x 8 EPROM single 5V	\$ 9.95	\$ 8.50
Cat. ZT-8468	2728	28	EPROM	\$ 16.95	\$ 15.95
Cat. ZT-8470	27256	24	EPROM	\$ 116.95	\$ 125.00
Cat. ZT-8801	MN3001	16	2 x 512 static bucket brigade	\$ 24.00	
Cat. ZT-8805	AY-3-101SD	40	UART	\$ 11.95	
Cat. ZT-8822	S-84V AC lamp cont.	16	84V AC lamp cont.	\$ 8.95	
Cat. ZT-8830	XR2206	16	Function generator chip	\$ 112.00	\$ 112.00
Cat. ZT-8831	XR2211	14	Phase lock loop	\$ 11.50	
Cat. ZT-8832	XR2240	16	Prog counter/timer	\$ 4.25	\$ 3.85
Cat. ZT-8834	MC1411	16	10 bit digital int'l rec	\$ 2.95	
Cat. ZT-8836	DC0201	16	CJ interrupt	\$ 2.00	\$ 1.80
Cat. ZT-8840	DM7216A	28	Freq counter/display driver	\$ 95.00	
Cat. ZT-8845	MM58037	40	Noise generator	\$ 3.90	
Cat. ZT-8850	U494	40	Switchmode power supply	\$ 5.95	
Cat. ZT-8855	ULN2003N	40	Source driver	\$ 2.00	\$ 2.55
Cat. ZT-8862	MC13020	20	COQUAM stereo AM decoder	\$ 11.95	
Cat. ZT-8865	MM7910	28	World chip modern	\$ 29.95	
Cat. ZT-8868	MC14411	16	Bit rate generator	\$ 8.00	\$ 6.00
Cat. ZT-8884	MC1413	16	Hex BCD decoder	\$ 10.00	\$ 8

## Z80 Microprocessor 1.7MHz

By today's standards the old Z80 is a pretty pedestrian CPU. Nowadays we only stock the 4MHz 'A' version. But guess what? We have found a cache of old Z80 parts! They were once hard to get and will become hard to get in the future. So at the prices shown below grab a few spares while you can. Standard 1.7MHz.

Z80 CTC 28 pin Cat. ZZ-8038  
1-9 \$2.00 ea - 10+ \$1.50 ea  
Z80 PIO 40 pin Cat. ZZ-8037  
1-9 \$3.00 ea - 10+ \$2.00 ea

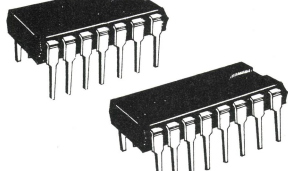


## V20 (uPD70108)

8/16 bit high performance CMOS microprocessor - 8MHz.  
Replace the 8088 or 8088-2 in your IBM PC compatible and increase its power by up  
to 40%/40 pin plastic DIP case. **\$23.95** 10 up **\$22.50 ea**  
Cal. ZZ-8070

## AD590 Temperature Sensor

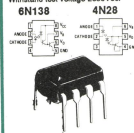
As used in ETI Temperature Probe kit. Cat. ZK-8950 10+ \$11.50 ea \$13.50



## Opto Couplers

Cat. ZD-1920	MOC3020/ MOC3021
	Triac opto coupler
1-9 \$3.45	10+ \$3.20
Cat. ZD-1928	4N28/4N25
	Opto coupler
1-9 \$1.50	10+ \$1.30
Cat. ZD-1930	TE113
	Opto coupler/ Darlington
1-9 \$1.00	10+ \$0.95
Cat. ZD-1940	6N138
	Opto coupler
1-9 \$13.50	10+ \$13.00

6N138 Low saturation voltage, high gain output  $V_{ce} = 7V$  max. • Typical data rate (NRZ) 300k bps • Current transfer ratio 300% min • Specified input current 1.6mA • Withstand test voltage 3000Vdc  
4N28 Darlington output  $V_{ce} = 7V$  max • Typical data rate (NRZ) 3k bps • Current transfer ratio 250% min • Specified input current 1.0mA • Withstand test voltage 2500Vdc



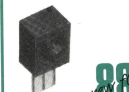
## "Spy in the Sky" Sensor

The Pyroelectric Infra red sensor element is the 'eye' of a passive infra red detector. It measures 10mm high, 9mm wide and only 6.2mm deep. The IRAFOPI-P comes complete with full technical data including performance graphs. Information on the operating principle and two typical application circuits!

- Typical applications:
- Burglar alarms
- Proximity detectors
- Automatic door/shutter switch
- Toys, robotics
- Accident prevention/machine guard
- Electronic appliances
- Automatic lighting (in toilet?)

Cat. ZR-9500

**\$19.95**



## Velostat

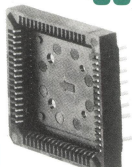
Non-static sheathing for storing CMOS, ICs, LSIs, etc. Will store up to 150 IC's on one sheet - reusable. Size: 225 x 150mm Cat. ZR-9999

**\$5.95**

## 68 Pin PLCC Carrier

Plastic leaded chip carrier. Cat. PI-6300

**\$14.95 ea**  
10+ \$13.50 ea



## Texas Instruments TL-172C Hall Switch

This device is a TO-92 normally off electronic switch that utilizes the Hall Effect to sense the presence of a magnetic field. The TL-172C is actually an integrated circuit with signal conditioning, hysteresis functions and output transistor on the one chip. A magnetic field of sufficient strength is sufficient to switch the TL-172C into a low impedance (on conduction) state. SPECS:

$V_{cc} + 7V$  • Output voltage = 30V • Output current = 20mA • Temp 0 - 70°C • Drive TTL level, transistor triac etc. Data sheet supplied with unit if requested.

Cat. ZH-8902

**\$5.00 ea**

10+ \$4.50 ea

## MAX 232

16 pin dual RS232 receiver/transmitter. For new designs, the MAX232CPE makes an excellent replacement for 1488 and 1489.

Features: • meets all EIA RS232C specs • generates +5V output from 5V supply • highly useful when +12V supply is required for RS232 drivers, but is not available • +30V input levels • also converts RS232 levels to TTL levels • 2 inputs • 2 outputs

**\$12.95**



## MAX 231

14 pin dual RS-232 transmitter/receiver. Meets all EIA RS232C specs. Operates from +5V to +12V. 2 drivers and 2 receivers. Onboard voltage converter, +30V input levels. Low power CMOS: 5mA. Suited for computers, peripherals, instruments, modems, battery powered systems. Cat. ZK-8823

**\$13.95**

## Production IC Sockets

GOLD INSERT - MACHINED PIN - ANTI WICKING

Ideal for professional/portable or field service equipment.

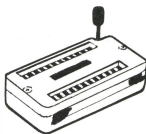
Cat. No	Pins	1-9	10+
PI-6452	8	\$1.00	90c
PI-6454	14	\$1.35	\$1.25
PI-6456	18	\$1.50	\$1.35
PI-6458	18	\$1.65	\$1.50
PI-6460	20	\$1.80	\$1.80
PI-6462	22	\$2.00	\$1.85
PI-6464	24	\$2.30	\$2.10
PI-6466	28	\$2.60	\$2.40
PI-6468	40	\$3.25	\$3.00

MADE IN WEST GERMANY  
ALL GOLD INSERT MACHINE PIN  
GUARANTEED NOT TO WICK!



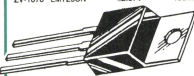
## ZIF (Zero Insertion Force) Sockets

Cat. No	Pins	1-9	10+
PI-6522	24	\$19.95	\$18.50
PI-6523	28	\$21.95	\$20.50



## Voltage Regulators

Cat. No	Type	Volt	Amp	Case	1-9	10+
ZV-1505	7805LM340T5	+5V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1506	7806LM340T6	+6V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1508	7805LM340T5	+8V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1512	7812LM340T12	+12V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1515	7815LM340T15	+15V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1524	7824LM340T24	+24V fixed	1A	TO-220	\$1.20	\$1.10
ZV-1525	7905LM320T5	-5V fixed	1A	TO-220	\$1.65	\$1.50
ZV-1532	7912LM320T12	-12V fixed	1A	TO-220	\$1.65	\$1.50
ZV-1535	7915LM320T15	-15V fixed	1A	TO-220	\$1.65	\$1.50
ZV-1539	78L05 low power	+5V	300mA	TO-220	\$1.65	\$1.50
ZV-1605	LM309K/7805KC	+5V fixed	1.5A	TO-3	\$4.95	\$4.75
ZV-1610	LM317K	+2.3V adj	1.5A	TO-3	\$7.00	\$6.75
ZV-1615	LM317T	+2.3V adj	1A	TO-220	\$2.40	\$2.30
ZV-1620	LM337T	-1.2 - 37V	1.5A	TO-220	\$2.95	\$2.75
ZV-1624	LM338-2.5	2.5V ref	10mA	TO-92	\$3.95	\$3.75
ZV-1625	LM337K	-2.3V adj	3A	TO-3	\$10.95	\$9.95
ZV-1635	LM350K	+1.2 - 32V adj	3A	TO-3	\$9.50	\$8.95
ZV-1645	LM396K	+1.5-15V	10A	TO-3	\$32.50	\$31.10
ZV-1675	LM723	+2.37V	150mA	TO-5	\$1.95	\$1.65
ZV-1676	LM723CN	+2.37V	150mA	14 DIL	\$1.50	\$1.40



## Production Low Cost IC Sockets

PCB MOUNT SOLDER TAIL

Cat. No	Pins	1-9	10+
PI-6500	8	20c	18c
PI-6501	14	25c	22c
PI-6502	16	28c	25c
PI-6503	18	32c	28c
PI-6504	20	48c	44c
PI-6505	22	50c	45c
PI-6506	24	50c	45c
PI-6507	28	50c	45c
PI-6508	40	70c	65c

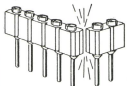
All tin plated Phosphor Bronze or Beryllium Copper



## Machine Pin IC Socket Strips

What a great idea. If you are a serviceman or hobbyist you don't have to keep every size of IC socket handy. Just keep a few of these and snap them off to make any length. • Quality machine pins • 32 pins per length. Cat. PI-6470

**\$3.20 per length**  
10+ \$3.00 ea







## Packs Electrolytic Pack

55 quality most RB types electrolytics supplied. Values range from 1uF to 470uF. Voltages from 16 to 63. Cat. RE-6250  
**\$5 in pack**

**\$6.50**



## Greenpac Pack

- metallised polyester  
60 top quality prime spec greenpacs supplied From 0.001uF to 0.22uF, all 100V  
Cat. RC-5199  
**\$7.95**  
60 in pack



## Ceramic Pack

60 top quality prime spec 50V working ceramics. Values from 10pF to 0.1uF.  
Cat. RC-5399  
**\$5.95**  
60 in pack



## Blue Chip Capacitors

Extremely small 50V high quality ceramic type. Low inductance for bypass applications.  
**0.01uF PACK OF 100**  
Cat. RC-5495 **\$12.50**  
**0.1uF PACK OF 100**  
Cat. RC-5496 **\$16.50**



## Precision Capacitor Pack 1 & 2%

Stock up now. These are normally \$3 to \$4 each. Values range from 220uF to 0.22uF. We supply 2 of each value up to 7 different values. Most are 1% with some 2%.  
**PACK OF 120**  
**\$12.50**  
Cat. RG-5198  
**USUALLY WORTH \$60.00**

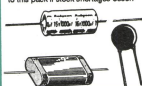
## Mixed Capacitor Pack

Don't miss this bargain! This pack contains approximately 150 assorted capacitors. Not junk values, most are normal range stock. Here's what you get:

RT Electro  
1uF, 4.7uF, 25uF, 100uF, 220uF, 470uF most 63V  
1000uF 16V  
1uF, 2.2uF, 25uF, 47uF  
Greenpac  
100V - 0.0022uF, 0.01, 0.22, 1uF  
Greenpac  
830V - 0.0022uF, 0.1uF  
Ceramic  
4.7pF, 47pF, 220pF, 470pF, 0.022uF  
Polystyrene  
220pF, 820pF, 2200pF  
1KV Ceramic  
330pF, 470pF, 680pF -

PLUS LOTS MORE  
**150 PRIME SPEC CAPACITORS FOR \$10.00**

**THAT'S ONLY 6.6¢ EACH!! SAVE 84%**  
At our current prices these caps are worth \$61.00!  
Cat. RE-6250  
We reserve the right to make changes to this pack if stock shortages occur.



## Metal Film Resistors

150 quality 1% 1/4W 50ppm resistors supplied. Again, more common values supplied.  
Cat. RR-0650  
**\$6.95**  
**150 IN PACK**

## Resistor Networks

50 assorted values, top quality, 10 lead resistor networks. This pack would normally be worth \$40 - values range from 680 ohms to 1M.  
Cat. RR-3380  
**\$10.00** - that's 20¢ per network!

## Bargain Bags

Contains approximately 2kg of assorted electronic goodies - 'JUNK' if you like, but all brand new components etc. Ideal to fill up your junk box. We expect to have these available at most times, but availability does depend on how much junk we can find. Unfortunately due to the massive weight plus normal rates plus \$2.50.  
Cat. XB-9000  
**\$12.95**

## Mixed Electrolytic Capacitor Pack

Another absolute bargain. This pack contains approximately 80 assorted RB/RT style electrolytics. Most are standard stock lines.

Here is what a typical pack contains:  
uF Values: 1, 2.2, 10, 22, 25, 47, 100, 150, 220, 470, 680, 4700, 10000  
Voltages: 6.3, 10, 16, 25, 35, 40, 50, 63, 250

A great asset for your parts bin.  
**OVER 80 CAPACITORS FOR \$10**

That's only 12.5¢ each. Our cheapest stock electro costs 28¢, and some supplied in this pack cost as much as \$3 each!!  
We reserve the right to make changes to this pack if stock shortages occur.  
Cat. RE-6280



## 1/4W Resistors

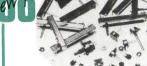
Over 300 1/4W 5% 1st grade resistors are supplied in this pack. We supply more of the popular values. From 10 ohms to 10M ohm.  
Cat. RR-1680

**OVER 300 IN PACK**  
**\$6.50** that's less than 2¢ each!!



## Mixed Pots

A pack of at least 35 potentiometers which includes slider pots - single and dual, an assortment of pots and tab style pots with assorted shafts and a selection of quality 5mm vertical sealed trim pots and open 5mm horizontal styles. This represents excellent value at only \$10.  
Cat. RP-3902



## LED

PACKS OF 100 UNITS  
5mm RED Cat. ZD-1690 **\$15.50**  
3mm RED Cat. ZD-1692 **\$19.50**  
Assorted pack consisting of 20 x 5mm red, 20 x 5mm mixed (green, yellow, orange), 40 x 3mm red, 20 x 3mm mixed (green, yellow, orange) BONUS 10 x 5mm mounting hardware AT NO CHARGE  
Cat. ZD-1694  
**\$19.50**

## Transistor Pack

100 mixed BC series transistors. More of the common ones.

Consists of:  
15 x BC547 - 20 x BC548  
20 x BC549 - 15 x BC557  
15 x BC558 - 15 x BC559  
Cat. ZT-2170

**100 IN PACK**  
**\$11.95**



## Mixed Semi- conductors

This pack includes EPROMs, RAM, CMOS, TTL, Transistors, diodes and Zeners - the EPROMs alone are worth \$10.00!  
Cat. ZP-8990

**100 SEMIS FOR \$10.00**

## Diode

1N914  
Signal Diode  
Cat. ZR-1105  
**PACK OF 100 \$4.95**  
1N4004  
1A 400V Rectifier diode  
Cat. ZR-1005  
**PACK OF 100 \$7.50**  
1N4007  
1A 1000V Rectifier diode  
Cat. ZR-1008  
**PACK OF 100 \$14.00**

## Slider Pots

You don't see this very often. A pack of 20 sliders in assorted values between 5k and 500k, 20 for \$10. That's only 50¢ each!! The majority in the pack are dual gang which have been selling for \$5.50 each. A typical pack includes values such as 5k, 50k, 100k, 250k, and 500k in 45 and 60mm lengths in single and dual styles.  
GET ONE WHILE THEY LAST!  
Cat. RP-3903  
**ONLY \$10.00**



**HURSTVILLE 570 7000**

Packs

## Alligator Clips

HM-3064  
Mini red 26mm  
SMALL 10+ 37c  
40c  
HM-3066  
Mini black 26mm  
40c 10+ 37c  
HM-3068  
Medium red 32mm  
50c 10+ 45c  
HM-3070  
Medium black 32mm  
50c 10+ 45c



HM-3058  
IC alligator clip red  
30c 10+ 27c  
HM-3060  
IC alligator clip black  
30c 10+ 27c



## Car Battery Type Clips

EXTRA LARGE  
These have insulated colour  
coded handles and will clip  
over a car battery terminal.  
Total length 110mm. Jaw  
opening - max 20mm.  
Cat. HM-3062

**\$2.50 pr**  
10+ \$2.25



## Alligator Line Clip

3 way TV clip for fastening  
antenna lead in to TV.  
Cat. HM-3050

**80c ea**

10 up 70c each



## IC Test Clips

**SMALL**  
These have a syringe action  
and are ideal for working with  
small components.  
RED Cat. HM-3040  
BLACK Cat. HM-3041

**\$1.20**

10 or more  
**\$1.10 each**



**MEDIUM**  
90mm IC clip RED  
Cat. HM-3044  
90mm IC clip BLACK  
Cat. HM-3045

**\$1.50**

10 or more  
**\$1.35 each**



**LARGE**  
137mm IC clip RED  
Cat. HM-3046  
137mm IC clip BLACK  
Cat. HM-3047

**\$2.75**

10 or more  
**\$2.50 each**



## Egg Insulator

Genuine porcelain - not plastic.  
A high quality porcelain heavily  
glazed insulator.  
Will last a lifetime as it is  
impervious to the UV effects of  
sunlight.  
32mm long, 23mm diameter  
(approx) 5KV rated.

Cat. LF-1080

**95c**

10 up 85c each

## Mini Coil Pack

Pack of 4 standard AM  
transistor radio coils (red,  
black, yellow and white)  
1F, 50c, etc.

Cat. LF-1050

**PACK 4 \$2.50**

## F16 Ferrite Slug

Cat. LF-1226

**\$1.20**

## Ferrite Parts

### Balun Formers

Ideal for RF matching  
transformers and balanced  
mixers.

Also used to match 300 to 75  
ohm TV antennas.

**LARGE:** Type 1050/1/F14

40MHz to 200MHz

Cat. LF-1220

**95c** each 10+ 85

**SMALL:**

Old No.: Type 1050/2/F14

New No.: Type 42-002-31

10MHz to 30MHz

Cat. LF-1222

**95c** each 10+ 85c

### NEOSID FORMER

No: S2-001.60

Cat. LF-1224 **\$1.20**



## Toroidal Ring Cores

Suitable for interference  
suppression filters, pulse  
transformers and broadband  
transformers. They have no air  
gaps and are the powdered  
iron type.

**LARGE:**

(Old No.: Type 17-146-10;

New No.: Type 17-745-2)

Size 44 O.D. x 24 I.D. x

16.5mm(H)

Cat. LF-1242

**\$11.95**

**SMALL:**

(Old No.: Type 17-132-10 ;

New No.: Type 17-732-22)

Size 15 O.D. x 7.5 I.D. x

6mm(H)

Cat. LF-1240

**\$3.95**



## Ferrite Beads

Used in many projects for  
suppression. Mount through  
transistor legs. Size 4mm O.D.  
x 2mm I.D. x 5mm long  
Alternating frequency range  
50kHz - 500kHz  
Cat. LF-1250

**20c** ea

10 up 16c each



## Tube Cores

Ideal for making small  
inductors for RF suppression/  
bypass. Simply loop a short  
length of enamelled copper  
wire back through. Low cost  
RF choke suppression!  
Siemens B52110-A5021 type  
Dimensions: 18mm long, 6mm  
dia, 3mm dia. hole  
PACK 10 Cat. LF-1210

**\$1.00**

PACK 100

Cat. LF-1212

**\$6.00**



## Pot Cores

Cat. LF-1265  
FX2242 Cores (pr)

**\$12.50**

Cat. LF-1266

FX2242 Bobbin

**\$ .90**

Cat. LF-1260

FX2243 Cores (pr)

**\$24.95**

Cat. LF-1261

FX2243 Bobbin

**\$ 1.25**



## Ferrite Rod

**TYPE 1**  
Length 200mm x 9mm  
diameter - round

Cat. LF-1010

**\$1.50 ea**

10+ \$1.20 ea

**TYPE 2**  
Length 120mm x 9mm  
diameter - round

Cat. LF-1015

**75c ea**

10+ 50c ea

**TYPE 3**  
Length 79mm x 13mm - flat

Cat. LF-1018

**75c ea**

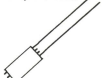


## Bargain RF Choke

Heavily attenuates from  
10MHz - 100MHz. Uses  
Phillips Farvacute bead with  
3 turns of tinned wire. Will  
carry 2 - 3 amps so is ideal  
for in-line RF attenuator in  
power supply wiring.  
Cat. LF-1200

**\$1.00** each

10 up 80c each



## Video Modulator

As used in our Colour Bar  
Pattern Generator kit.  
Tuned to channel 1  
Australia. Operating voltage  
6 - 12V DC.  
Cat. LM-3945

**\$12.95**

10+ \$12.50 ea



## Quality Video/ Audio RF Modulator

Our best ever unit. This  
modulator has been  
specially built to our  
stringent specifications. It is  
a VHF unit switchable to  
Aust. Ch 3 or 4. The audio is  
placed at the correct  
subcarrier frequency and  
output frequency is stable  
with good strong signal. Full  
specs (see mean FULL) are  
supplied with each unit.  
Cat. LM-3848

**\$19.95**

**88**

88

## Make Printed Circuit Boards from Magazine pages with "PHOTO ETCH™" Printed Circuit Kit ER-4

The REVOLUTIONARY Photographic way that makes perfect printed circuits from original artwork or a magazine page!

# NO

## CAMERA DARKROOM FILM CUTTING TRACING

It's so simple! The ER-4 Photo Etch Kit contains all the chemicals necessary for any hobbyist, engineer or student to create professional circuit boards. Use this kit to generate your own 1:1 artwork or use magazine art, then use the patented Pos-Neg process to make a photo negative, sensitize and expose a blank copper board, develop and etch it. The magazine page is not destroyed in the process. No darkroom or camera is required. All necessary materials and tools are included: 5 x 6 Print Frame, 4 sheets photo copy film (ER-5), 16oz. resist developer (ER-8), 4oz. negative-acting etch resist (ER-7), 2 blank copper circuit boards (ER-1), dry concentrated etchant (ER-9), film developer and fixer (ER-6).

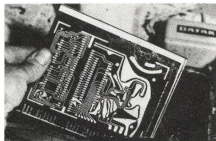
### DETAILS OF KIT CONTENTS:

- 120 x 148mm steel printing frame with glass and backboard • Pos-Neg™ yellow filter • 4 sheets photocopy film • 450ml each of film developer and fixer • 700 grams negative photo resist liquid • 200 grams resist developer • 120 x 148mm and 100 x 114mm copper clad circuit boards • 500 grams anhydrous Ferric Chloride • 2 sheets polyester drafting film • 1 roll each 1.5mm and 0.75mm tape • 8 sheets dry transfer direct PC patterns including donut pads, lines, jog, DIP and round can IC's, transistors, edge card connectors • 12 page instruction book.

Cat. NC-4260

**\$99.00**

REMEMBER! You only need 1:1 artwork or 1:1 artwork from a magazine page and you can have your own copy of the PCB! The artwork or the magazine page is not destroyed in the process.



ER-7



ER-8



ER-9



ER-1



ER-5

## Spare chemicals/material to enhance your PCB production

## Film Developer & Fixer Replacement Pack ER-6

88

Contains three packets of chemicals to make 450ml of high contrast lithographic film developer and 450ml acid fixer. Handles up to 15 sheets of 125 x 150mm Pos-Neg film.  
Cat. NC-4264

**\$10.95**

## Copying Film ER-5 or ER-9

This polyester base film is dimensionally stable and is capable of making a negative or a positive from either opaque or translucent artwork in one step. No intermediate film is required. Exposing is done through a yellow filter to obtain a positive image from a positive original. Negatives are prepared with a yellow, then a white light exposure. One film surface is matte. It will accept retouching with photo opaque, pencil, India ink or dry transfers. Film is handled under subdued room light and exposed with a photoflood light source. Complete instructions and yellow filter are contained in the ER-4 and ER-10.

Supplied in two sizes: ER-5 gives you 6 sheets 125 x 150mm in a light proof bag. You can use the print frame supplied with the ER-4 kit or use the larger ER-10 Cat. NC-4280 frame.

Cat. NC-4270 6 sheets 125 x 150mm

**\$17.95**

ER-9 gives you 2 sheets 200 x 275mm. (The ER-10 print frame or similar contact print frame must be used).

Cat. NC-4272 2 sheets 200 x 275mm

**\$17.95**

## Large Contact Printing Exposure Frame

Large format (225 x 300mm) spring-loaded steel printing frame will accept 215 x 275mm artwork originals, photocopy film and sensitized printed circuit boards. Comes complete with glass, backboard, yellow Pos-Neg™ filter and instruction manual.  
Cat. NC-4280

**\$34.95**

## PCB Etch Resist (ER-7)

A liquid cinnamate resist in bottle with pump sprayer. May also be flowed on. The coated board is exposed to UV through a negative of the circuit pattern, then developed in ER-8 liquid. Unexposed parts of the resist coat are dissolved, while the exposed resist pattern stays to protect the copper when etched. One bottle coats over 1 square metre.  
Cat. NC-4266 118ml

**\$18.95**

## Etch Resistant Developer ER-8

A solvent blend that will develop ER-7 and other negative-acting photo resists. Resist areas that are not hardened by UV light are dissolved away. Hardened areas are unaffected. Similar to Kodak KPR which can be used in its place.  
Cat. NC-4267 473ml

**\$11.95**

## Copper PCB Tin Plating Solution (ER-18) Electrolysis

TINNIT is designed to plate bare copper circuit boards to enhance solderability. It has also been used to plate edge card connector fingers on prototypes when a low, stable contact resistance is needed, but gold is not available or desired. The 450ml size of TINNIT will plate up to 0.4 metre of copper with approximately 0.01mm of bright tin. Plating is complete after about 10 minutes in a fresh solution. Adhesion and solderability are excellent. No electricity is required; the material tends to plate any metal that is chemically more active than tin and is not oxidized by the plating bath. TINNIT has been successfully used to plate brass, bronze, iron and some carbon steels. The material is supplied as a dry mixture with an indefinite shelf life. When mixed with water, the solution has a life of approximately two months. You need add no acid or other materials to this solution. TINNIT contains all plating chemicals plus surfactants and cleaners to insure a perfect plate.  
Cat. NC-4276 Makes 450ml

**\$11.95**

As demand for greater PCB density increases so does the need for a more professional approach to PCB design. To help in this regard, Jaycar stocks a comprehensive range of PCB artwork materials from BISHOP GRAPHICS of the USA. This material is both dimensionally stable and accurate which, enables you to produce complex layouts with great accuracy. (Very necessary for LSI, for example). Once your artwork has been produced you can make your own board.

## Why Bishop Graphics Artwork Is Superior

We have offered many 'equivalent' PCB artwork tapes over the years at lower prices to the genuine Bishop Graphics material. Why do we stick with it? Well it's the one the professionals use and they know why. Now you can know too!

1. The artwork is very accurate. For example the DIL patterns are made to a tolerance of 0.0007.
2. The line tape is precision slit from large rolls under very low stress. Precise edges.
3. The line tape is very flat black. It will not reflect light and so the line will not blur due to reflected light. Result? Absolutely sharp edges to trackwork.
4. The benefits of Crepe. The tape is 'creped'. This allows tape to be curved, a saving on corner art. Once down the curve will stay where it is. Inferior tapes try to 'creep' back to straightness. Another advantage of crepe is that you can cut through a line by mistake, realise your error and burnish the tape down again. The Bishop tape will close again. Inferior tapes can leave a hair line crack of light and an open circuit track on your PCB! Finally, to state the obvious - the tape is extremely flexible!

5. The tape is only 0.005" thick. This means that the tape will not cast a 'shadow' because of its thickness.
6. The secret adhesive. You can lay Bishop art down, peel it up again and relocate it many times. PCB artwork necessitates this and this is a valuable feature. It stays sticky!
7. Another secret. The adhesive does not 'bleed'. By this we mean that the adhesive will stay where it should be - under the art. Inferior adhesives creep away in time and the edges lose definition as a result. You can come back to Bishop Graphics artwork after a year and find no adhesive anywhere except under the art.
8. It's the most cost effective. Your labour is money. When you spend a lot of your valuable time on inferior artwork tape you - or your client - is losing money! More than the small difference between cheap artwork tape and value-for-money Bishop Graphics!

## Pre-Spaced Pads

Cat. No	Type	Pads
HG-9908	0.100" pitch 2.54mm	240



HG-9907	0.100" pitch 2.54mm	140
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HG-9908	0.156" pitch 3.96mm	150
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## DIL Patterns

Cat. No	Pins	Symbols	Price
HG-9909	14	32	\$5.60
HG-9910	16	32	\$5.60
HG-9911	18	28	\$5.60
HG-9912	24	12	\$5.60
HG-9913	28	12	\$5.60
HG-9914	40	8	\$5.60



## Black Artwork Tape

Cat. No	Size	Price
HG-9930	0.026" wide	\$3.95
HG-9931	0.031" wide	\$4.25
HG-9932	0.040" wide	\$4.25
HG-9933	0.050" wide	\$4.25
HG-9934	0.062" wide	\$4.30
HG-9935	0.080" wide	\$4.30
HG-9936	0.093" wide	\$4.30
HG-9937	0.100" wide	\$4.30
HG-9938	0.125" wide	\$4.30
HG-9939	0.200" wide	\$4.30
HG-9940	0.250" wide	\$5.20



## E-Z Circuit Targets

These are designed to simplify and improve photo reduction and registration (the accurate placement of symbols and circuitry) during all stages of printed circuit artwork and board production.

Cat. HG-9929	32 Symbols
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## Transistor Patterns

TO-5 (36 pads)
Cat. HG-9922



TO-18 (36 pads)
Cat. HG-9924



## DIL Patterns Narrow Cut

Cat. No	Pins	Price
HG-9918	14	\$5.60
HG-9919	16	\$5.50
HG-9920	40	\$5.80

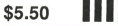


## Edge Connector Patterns

0.1" pitch (25 strips)
Cat. HG-9950

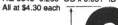


0.156" pitch (5 strips)
Cat. HG-9952



## Donut Pads

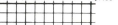
Cat. No	Type	Sym
HG-9941	0.080" OD x 0.031" ID	96
HG-9942	0.100" OD x 0.031" ID	96
HG-9944	0.125" OD x 0.031" ID	96
HG-9945	0.156" OD x 0.031" ID	96
HG-9947	0.200" OD x 0.031" ID	108
HG-9948	0.250" OD x 0.031" ID	128



## Artwork Films Polyester

Always use a background grid during printed circuit artwork and layout preparation to ensure maximum accuracy on the final PCB. 10 x 10 grid, matte one side - 0.003" thick. This is the material you lay your patterns on.

8.5 x 11" PACK OF 2	\$4.25
11 x 17" PACK OF 2	\$7.50
Cat. HG-9960	



ACTUAL  
SIZE

## Pressure Sensitive Copper Tapes

Ideal for repairing damaged or broken conductor traces on a PCB. Use to modify circuitry on existing PCB's.

Cat. HG-9901	0.031" wide	\$4.30
Cat. HG-9902	0.050" wide	\$4.30
Cat. HG-9903	0.100" wide	\$5.35



## Artwork Accessories

X-ACTO KNIFE	\$4.65
Cat. HG-9955	



X-ACTO BLADES	\$3.95
Trim pack of 5	
Cat. HG-9956	



X-ACTO BLADES	\$3.95
Art pack of 5	
Cat. HG-9957	



## "Riston"

This is basically blank printed circuit, with a photo-resist factory deposited on it. A photo resist is a chemical that changes composition when exposed to light. Once you take the "RISTON" and PCB out of its lightproof black plastic envelope you have a reasonable amount of time to lay your PCB pattern on the board. Where the PCB pattern fails, the chemical resist will be in shadow or "masked" by the PCB pattern.

You can expose the PCB pattern and board in broad daylight, however a controlled source of ultraviolet light is recommended. After a suitable time you remove the PCB pattern. Where the "RISTON" coated PCB was in shadow the photo resist will not have changed chemical composition. Where it has been exposed, it will. You then apply a developer to finish the photo resist process.

After this you simply dip the PCB into the etching

## Riston PCB

Single side 127 x 152mm	\$6.50
Cat. HG-9970	
Single side 152 x 254mm	\$12.00
Cat. HG-9972	
Single side 254 x 254mm	\$23.50
Cat. HG-9974	

## CCRD30 Developer

500ml	Cat. HG-9964	\$3.50
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## Stripper CRS-40

Stripper required to clean board before soldering.	
500ml bottle	Cat. HG-9968
<b>\$4.35</b>	

## DaloPen

This special fibre tip marker is great for one-off PCB production. Each resistant ink. Includes spare tip.

Cat. TM-3000	\$4.75
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## 8007 Scotchcal Film

### USED WITH BOTH RISTON AND SCOTCHCAL

This is known as exposure film and is orange in colour.  
Size 10" x 12". Use this film to produce either negative or positive from your original artwork. If you have positive artwork this film will reproduce it as a negative and conversely if your artwork is negative this film will reproduce it as a positive. The film is then used with either Riston or Scotchcal to produce your final board.

Cat. HG-9962 10" x 12"

**\$7.95**

## SCOTCHCAL - 3M

We also stock PCB and panel production materials made by the US 3M company.

**PCB PRODUCTION**  
Liquid photo resist in both positive and negative acting configurations are stocked. The liquid is applied to blank, clean PCB with a cotton wool swab. The board is allowed to dry (in a dark location). The board and artwork (film) is then exposed in the same manner as Riston. (Note that the negative resist i.e. CNR05 will resist where it is EXPOSED). You then use the appropriate developer and etch in the usual manner. If you have positive artwork and want negative (or visa versa) use 8007 reversing film. If you make a lot of PCB's the 3M system is cheaper than Riston in the long run.

## Positive Photo Resist CPR05

This photo sensitive product is used in the production of PCB's.  
Cat. HG-9980 50ml

**\$8.95**

## Negative Photo Resist CNR05

This product is similar to the CPR05 product. The difference being that this is a negative working compound  
Cat. HG-9983 50ml

**\$6.10**

## Developer CPD07 for Positive

This solution is used in conjunction with CPR05 for developing the PCB pattern.  
Cat. HG-9981 70 grams

**\$3.50**

## Developer CND5 for Negative

This solution again is similar to the CPD7, the exception being that this one is used in conjunction with the negative photo resist.  
Cat. HG-9984 500ml

**\$8.90**

## Stripper CRS-40

Strip your boards clean before soldering.  
Cat. HG-9968 500ml

**\$4.35**

## Panel Scotchcal

This is the 3M name for their system of producing professional grade panels from artwork but without professional facilities. You can make your finished project look great with a Scotchcal front panel.

Like Riston, Scotchcal has the photo resist already on it. You expose the Scotchcal in the usual way. Develop with 8500 solution and remove exposed material with CRS-40 stripper (equivalent to an etchant). It is really that simple!

## Aluminium Scotchcal

This Scotchcal product is available in both red and black. This means when the material has been developed the front panel will be either red or black on silver. You will end up with professional front panels. We recommend you spray the finished panel with clear lacquer (Cat. NA-1002) to maintain the clean fresh look.

**SHEET SIZE 10" x 12"**  
Cat. HG-9988 BLACK EMULSION  
Cat. HG-9989 RED EMULSION

**\$9.95 ea**

## Plastic Scotchcal

This is similar to the HG-9988/9989 except that the background finish is white plastic, not silver. Three different colours are available, all with WHITE background.

**SHEET SIZE 10" x 12"**  
Cat. HG-9990 RED on WHITE  
Cat. HG-9991 BLACK on WHITE  
Cat. HG-9992 BLUE on WHITE

**\$9.95 ea**

## 8500 Developer

This is a clear liquid which enables the user of Scotchcal aluminium or plastic materials to develop the exposed material.

Cat. HG-9966 100ml bottle

**\$3.35**

## Stripper CRS-40

Cat. HG-9968 500ml

**\$4.35**

### SPECIAL NOTE: DO NOT MIX 3M DEVELOPER WITH RISTON DEVELOPER

## Positive Photo Resist Spray

This aerosol is a fast drying positive photo resist for one to one reproduction of circuit, diagrams and images on metals from transparent positive masters. (Film)

- ADVANTAGES**
- Up to 50% cost saving achieved compared with using pre-coated boards
  - Outstanding resolution - better than 0.1mm
  - Ability to achieve extremely thin edge to edge uniform coating thickness
  - Easy to apply, quick drying, safe and simple to process
  - Covers approximately 2.2 sqm

Cat. HG-9976

**\$7.95**

## Developer

Use this to achieve best results with the above photo resist aerosol spray.  
Cat. HG-9978

**\$9.50**

## Chemistry

### Ferric Chloride

200 grams makes approximately 1 litre of etchant.  
Cat. NC-4252

**\$2.75**

### Ammonium Persulphate

The alternative to Ferric Chloride. Mix contents (400 grams) with 1.5 litres of hot water to which copper board approximately 500g/cm.

Supplied in child safe bottle.

Cat. NC-4254

**\$6.95**



## Powerful 6000 RPM Mini Drill



Tons of torque. Just the shot for PCB work. 12V DC operated from external power pack. 1.2mm chuck capacity. Supplied complete with 1mm drill bit.

Cat. TD-2450

**\$19.95**

Drill Bits for PCB work  
Cat. TD-2408 0.8mm \$2.20  
Cat. TD-2410 1mm \$2.20

## Magnifying Glass

A must for the hobbyist. This huge 4.5" diameter viewer allows hands free operation. It will fold into a neat and easy to store package.  
Cat. OM-3505



**\$14.50**

## Super Glue

Sticks in seconds, no clamping required, no mixing, no mess. Thousands of uses.  
Cat. NA-1500  
Standard tube size

**\$3.35**



## PVC Insulation Tape

Top quality PVC tape. Thousands of uses. 2 sizes available. 19mm wide.

**COLOURS:  
RED, BLACK, YELLOW,  
GREEN & WHITE  
5 metre roll**

Cat. NM-2800

**20 metre roll - red**

**40¢**

Cat. NM-2802

**20 metre roll - black**

**\$1.00**

Cat. NM-2803

**\$1.00**



## Service Aids

There are many brands of spray can products on the market. These vary from excellent quality to extremely poor. As most things the more you pay, the better they get. We have elected to bypass the cheap, inferior types and only stock top quality brands, such as Electrolube. You will pay a little more, but isn't it worth it?

## Video Head Cleaner

A-F spray whilst designed for cleaning metal surfaces and leaving no residue it is absolutely ideal for cleaning video heads. It comes with an extension tube to get to remote spots. Leaves absolutely no residue and blasts away grime with no danger of scratching. A sound investment in VCR care. Also great for audio heads, of course.

Cat. NA-1007

400 gram can

**\$10.50**

## Clear Circuit Lacquer

A flexible clear coating for protecting printed circuit boards. Special solder through lacquer, so previously coated boards can be soldered later.

Great for Scotchcal front panels tool  
ELECTROLUBE BRAND  
Cat. NA-1002

**\$6.75**

## PCB Cleaning Solvent

It may not be obvious, but many circuit problems occur when flux and other residues (even finger prints) remain on the PCB causing 'leakage' between tracks. If you work RF, high impedance (i.e. FET OP amps etc), ioniser or other circuits, PCB cleanliness is a MUST. The Jaycar PCB cleaning solvent is a spray that dissolves all flux residues and grime leaving the track work and board absolutely clean. We then recommend that you 'topicalise' the underside with spray-on lacquer. (Also available Cat. NA-1002 \$6.75)  
Cat. NA-1008

**\$5.95**

## Moisture Repeller

This 400 gram spray can is specially formulated for automotive, marine electrical and electronic applications.

- Dries out wet ignition
- Protects all metals against rust or corrosion
- Quickly penetrates and frees rusted parts
- Lubricates close fitting parts
- Stops battery corrosion and much more

Cat. NA-1020



**\$4.95**

## Spray Freezer

Instantly freezes components for finding intermittent faults, dry joints and over-heating problems.

ELECTROLUBE BRAND  
Cat. NA-1000

**\$6.60**

## Potentiometer Lubricant

A specially formulated lubricant designed for slider pots. Can be used safely with metal to metal, metal to plastic, and plastic to plastic.

The anti-friction properties will ensure the controls will not stick.

Ideal for lubrication of parts under pressure.  
Cat. NA-1012

**\$7.95**

## Conductive Varnish

This handy 200 gram spray enables you to do all manner of things. You can spray sheets of Styrene foam and make them suitable for storing your MOS ICs. Far cheaper than other methods! You can make conductive screens inside plastic boxes to shield RF. You can re-coat the back of CRTs. You can make conductive cabinets to reduce static. The paint dries to a hard varnish like film. Non-flammable and non-toxic. Grab a can now. You never know when you might need it!  
Cat. NA-1010

**\$8.95**

## Electronic Cleaning Solvent

A highly efficient solvent, recommended for cleaning tuners, switches, plugs and sockets, potentiometers, relays, etc. Low toxicity, non-corrosive with long tube for hard to get to spots.

Cat. NA-1004  
340 gram aerosol

**\$6.50**



## Nickel Screening Compound

This spray aerosol is an electrically conductive coating based on Nickel powder with an acrylic carrier resin. It is an extremely efficient EMV/RFI screening coating. It will adhere to a wide variety of substrates and can be used to coat cabinets for a variety of electronic & electrical housings.

- ADVANTAGES
- Excellent surface resistivity (0.7 ohms per sq at 2 thou)
  - Excellent adhesion to wide variety of substrates including ABS, and many other plastics.
  - Fast drying at room temps.
  - Approximate coverage: 1 sq metre at 2 thou dry film thickness

Cat. NA-1014

**\$26.95**

## Air Duster

It's pure compressed inert gas for removal of dust and air borne contamination from very delicate and inaccessible areas of electrical and electronic equipment.

400 ml spray pack - 550g nett.  
Cat. NA-1018

**\$11.95**

## "Plasti-Dip" Heavy Duty Flexible Liquid Coating

Plasti Dip is an air dry liquid plastic coating that produces a tough, thick plastic finish. It is virtually impervious to the elements & has good dielectric strength. It is ideal for making a plastic coating for the handles of tools, etc. It also provides excellent environmental protection for circuit boards, etc. Supplied in a 4.70ml dipping can. Will do dozens of tools.  
Cat. NP-1100 Red colour

**\$24.95**



## Solder Hobby Pack

Approximately 8 metres of 1mm resin cored quality solder.  
Cat. NS-3013

**\$1.30**

## Solder Reel

200 gram reel. 1mm universal gauge. Suitable for all types of electronic soldering. Resin cored and including bit saving additive.  
Cat. NS-3010

**\$7.95**

10+ \$7.50 ea



## De-Solder Braid

A specially treated piece of braid for removing solder from a PCB. Place the braid over the solder and apply soldering iron to efficiently remove solder.  
3mm wide.  
Cat. NS-3020  
5 feet long!

**\$2.50**



## Heatsink Compound

Heat conducting paste facilitates heat transfer from semiconductors to heatsinks. One tube will do up to 30 TO-3 package transistors.



7.5 gram tube

**\$3.50**

Cat. NM-2010

150 gram tube

**\$17.50**

Cat. NM-2012



## Breadboards

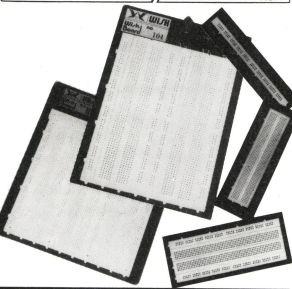
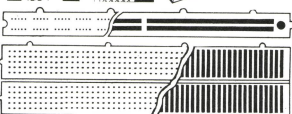
Jaycar breadboards are a convenient and economic way to build circuits and test parts without soldering. Components can be then reused many times.

Made from ABS Polymer. Internal contact terminals are made of alloy of silver and nickel and then plated. Resistance is under 1 milliohm at 1kHz. **LIFETIME GUARANTEE**

### Breadboard Specifications

Cat. No	Length	Width	Weight	Tie Points	5 Con Term	25 Con Bus	Binding Post	IC Cap 14***	Price
PS-8810	172	13	10	100		4			\$3.75
PS-8812	172	39	10	640	128	8		9	\$10.75
PS-8814	172	65	10	840	128	8		9	\$17.50
PS-8816	224	150	20	1640	256	16	3	18	\$39.95
PS-8818	240	195	2	2420	384	20	4	27	\$57.50
PS-8820	264	240	21	3260	512	28	4	36	\$69.95

\* Connected \*\* Capacity \*\*\* Pins



## Blank Fibreglass PCB

Single sided copper clad, for making your own PCBs.

Cat. HP-9514	150 x 75mm	\$1.95
Cat. HP-9512	150 x 150mm	\$3.75
Cat. HP-9510	300 x 300mm	\$9.95

## Doublesided Blank Fibreglass PCB

2 handy sizes

Cat. HP-9519	150 x 150mm	\$ 4.95
Cat. HP-9520	300 x 300mm	\$14.95



## Universal Pre-Punched Experimenters Boards

The low cost way to build prototypes or one-off projects!

We now stock 3 sizes of Phenolic board that has a matrix of punched holes on a 0.1" (2.5mm) pitch with a donut of tin plated copper around each hole. Each donut is separated from its neighbours by about a 0.5mm gap. This effectively isolates each pad but also makes it easy to bridge solder across to make interconnections. Each board also has "fingers" on opposite ends. These can be used to connect to and from the board or to a card edge connector. Finally the non-solder side of the board has an alpha-numeric grid printed on it to assist in component identification board layout.

3 SIZES:

SMALL 95 x 72mm, 25 x 30 holes (750)

3.6mm edge pitch

Cat. HP-9550 **\$2.45**

MEDIUM 140 x 95mm, 29 x 50 holes (1450)

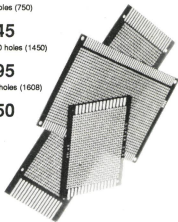
2.5mm edge pitch

Cat. HP-9552 **\$3.95**

LARGE 210 x 78mm, 24 x 67 holes (1608)

3.6mm edge pitch

Cat. HP-9554 **\$4.50**



## PC Boards Vero Type Strip

Alpha numeric grid, pre-drilled 0.9mm, 2.5mm spacing, 95mm wide x 3 handy lengths

Cat. HP-9540 95 x 76mm **\$2.25**

Cat. HP-9542 95 x 152mm **\$3.50**

Cat. HP-9544 95 x 303mm **\$6.50**



## Plug-in PC Board

60 x 100 x 2.5mm spacing. Silver plated.

One of the handiest boards of all - build up professional modules on this plug-in board.

Great for prototypes, 24 way edge connector.

Cat. HP-9532

**\$2.25**



## Blank Phenolic PCB

Single sided copper clad, for making PCB boards

Cat. HP-9506	150 x 75mm	\$1.65
Cat. HP-9507	150 x 150mm	\$2.50
Cat. HP-9508	300 x 300mm	\$6.95



## Thin Double Sided Copper Clad Blank PCB

This high grade fibreglass PCB material is about HALF as thick as normal PCB. The copper (double sided) is the same thickness as normal PCB. It is ideal for applications where weight is important i.e. model aircraft, cars, wireless microphones etc. It is also good for RF work as the ground plane effect is greater (because the sides are closer together). It is also fairly flexible.

It is available as double sided only. If you want single sided etch one side off.

2 SIZES

3" x 6" (75 x 150mm)

Cat. HP-9522 **\$2.25**

6" x 6" (150 x 150mm)

Cat. HP-9523 **\$3.95**

**COUNTRY ORDERS 008 022 888**

## 3mm Nuts, Screws & Washers

Bolts are round head and the nuts steel.

Cat. No	Size	Pkt Qty	1-9	10+
HP-0400	6mm	pk 25	\$ .95	\$ .85
HP-0401	6mm	pk 20	\$2.50	\$2.30
HP-0403	10mm	pk 25	\$ .95	\$ .85
HP-0404	10mm	pk 200	\$3.35	\$3.15
HP-0406	15mm	pk 25	\$ .95	\$ .85
HP-0407	15mm	pk 200	\$3.95	\$3.75
HP-0410	20mm	pk 25	\$1.20	\$1.10
HP-0411	20mm	pk 200	\$4.95	\$4.65
HP-0414	25mm	pk 25	\$1.25	\$1.10
HP-0415	25mm	pk 200	\$5.95	\$5.60
HP-0418	32mm	pk 25	\$1.50	\$1.30
HP-0419	32mm	pk 200	\$7.50	\$7.10
HP-0425	nuts	pk 25	\$1.25	\$1.10
HP-0426	nuts	pk 200	\$4.25	\$4.00
HP-0430	washers	pk 25	\$ .95	\$ .85
HP-0431	flat washers	pk 200	\$3.50	\$3.25
HP-0433	washer pk 25		\$1.25	\$1.15
HP-0434	washer 200		\$3.95	\$3.70



## 4mm Nuts, Screws & Washers

Bolts are roundhead and the nuts steel.

Cat. No	Size	Type	Pkt Qty	1-9	10+
HP-0450	10mm	R/H bolt	pk 25	\$1.25	\$1.10
HP-0451	10mm	R/H bolt	pk 200	\$3.95	\$3.70
HP-0453	15mm	R/H bolt	pk25	\$1.25	\$1.10
HP-0454	15mm	R/H bolt	pk 200	\$5.50	\$5.20
HP-0462	Hex	Nuts	pk 25	\$1.25	\$1.10
HP-0463	Hex	Nuts	pk 200	\$4.95	\$4.60
HP-0465	Flat	Washer	pk 25	\$ .95	\$ .85
HP-0466	Flat	Washer	pk 200	\$4.50	\$4.20
HP-0468	S/p/Flt	Washer	pk 25	\$1.25	\$1.10
HP-0469	S/p/Flt	Washer	pk 200	\$4.95	\$4.65

Cat. No	Length/Type	Qty	1-9	10+
HP-0500	10mm positive	10	\$1.50	\$1.30
HP-0504	12mm capscrew	10	\$3.25	\$3.00
HP-0506	12mm cheesehead screw	20	\$2.50	\$2.35



## 8BA Machine Screws & Nuts

Cat. No	Length	Pkt Qty	Price
HP-0200	12mm screw	10	\$1.50
HP-0220	Brass nut	25	\$1.50



## Self Tapping Screws

Nickel plated steel.

Cat. No	Type	Qty	1-9	10+
HP-0550	No 4 x 6mm	25	\$1.00	\$ .90
HP-0551	No 4 x 6mm	10	\$ .50	\$ .45
HP-0552	No 4 x 6mm	500	\$5.95	\$5.50
HP-0554	No 4 x 12mm	25	\$1.20	\$1.10
HP-0556	No 4 x 12mm	500	\$5.95	\$5.60
HP-0558	No 8 x 12mm	25	\$1.20	\$1.10
HP-0630	No 8 x 18mm (Black)	20	\$1.25	\$1.15

## 6BA Screws

Cat. No	Type	Qty	1-9	10+
HP-0255	6BA x 1/2" C/Su	25	\$1.95	\$1.75
HP-0257	6BA x 3/4" Cheese	25	\$1.95	\$1.75
HP-0254	6BA x 1/2" Cheese	25	\$1.95	\$1.75
HP-0280	6BA nuts	25	\$1.25	\$1.10
HP-0290	6BA flatwasher	50	\$1.25	\$1.10
HP-0295	6BA shimscrew	50	\$1.25	\$1.10

## Spacers

Untapped. Clearance 4BA or 1/8" ww.

Cat. No	Length	Qty	1-9	10+
HP-0860	6mm	8	\$ 1.20	\$1.10
HP-0870	6mm	100	\$ 9.75	
HP-0871	6mm	500	\$35.00	
HP-0862	9mm	8	\$ 1.30	\$1.20
HP-0864	12mm	8	\$ 1.50	\$1.40
HP-0866	25mm	4	\$ 1.40	\$1.30



## Nylon PCB Spacers

Superb range of spacers. Fixing is by size 6 or 8 self tapping screws. The flat centre section can be gripped to prevent rotation while fixing.

Cat. No	Length	Qty	Price
HP-0980	6mm	5	\$1.00
HP-0982	12mm	5	\$1.00
HP-0984	19mm	4	\$1.00
HP-0986	25mm	4	\$1.20
HP-0988	32mm	4	\$1.40
HP-0990	36mm	4	\$1.50



## 3mm Tapped Metal Spacers

Cat. No	Length	Qty	1-9	10+
HP-0900	10mm	8	\$ 1.65	\$ 1.50
HP-0901	10mm	100	\$10.50	
HP-0904	15mm	8	\$ 1.85	\$ 1.65
HP-0905	15mm	100	\$12.95	
HP-0907	25mm	8	\$ 2.75	\$ 2.50
HP-0908	25mm	100	\$22.50	



## Nylon PCB Standoff

Saves using nuts, bolts and spacers.

Size 8mm (1/4")

Cat. No	Pkt Qty	Price
HP-0770	8	\$1.25
HP-0772	100	\$9.95



## Cable Clips

A must for your next cable installation.

Cat. No	Suits	Pkt	1-9	10+
HP-1170	Figure 8 cable	50	\$4.50	\$4.25
HP-1172	Telephone cable	50	\$4.25	\$4.00
HP-1174	Coaxial cable	50	\$4.50	\$4.25
HP-1176	7-9mm cable	30	\$2.85	\$2.70
HP-1178	10-12mm cable	20	\$2.60	\$2.50



## Cable Clamps

Used for securing cable to chassis.

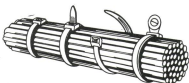
Cat. No	Size	Pkt	1-9	10+
HP-0752	For 5mm cable	6	\$1.00	\$ .90
HP-0754	For 7mm cable	6	\$1.00	\$ .90
HP-0756	For 10mm cable	6	\$1.00	\$ .90



## Cable Ties

Great for keeping those wiring looms together.

Cat. No	Length	Pkt	1-9	10+
HP-1200	100mm	20	\$1.20	\$1.10
HP-1201	150mm	15	\$1.75	\$1.60
HP-1202	200mm	15	\$1.95	\$1.75



## Cordgrip Clamps

PACK OF 4

Cat. HP-0716	for cables to 9mm dia. (3 wire mains)	1-9	10+
		\$1.25	\$1.15
Cat. HP-0718	for figure 8 cables	1-9	10+
		\$1.00	\$ .90



## Rubber Grommets

Cat. No	Size	Pkt	1-9	10+
HP-0702	8mm hole	8	\$1.50	\$1.40
HP-0704	9mm hole	8	\$2.00	\$1.80



## Rubber Feet

Cat. No	Type	Qty	1-9	10+
HP-0800	Screw on	8	\$ 1.95	\$1.75
HP-0810	12mm stick on	100	\$19.95	\$17.95
HP-0815	12mm stick on	4	\$ 1.50	\$1.35
HP-0820	20mm stick on	100	\$19.95	\$18.95
HP-0825	20mm stick on	4	\$ 1.75	\$1.60
HP-0830	Large plastic feet	each	\$ .70	\$ .75



## Solder Lugs

A pack of 50 assorted solder lugs for any screw down connection.

PACK OF 50 \$1.50

Cat. HP-1350

## 2mm Screws

2mm diameter, 8mm long cheesehead screw for securing slider pots and most slider switches

Cat. HP-0390

PACK OF 4 49c



## Speaker/Equipment Cabinet Fittings

Jaycar has expanded its range of hardware to include road cabinets, speaker and other equipment enclosure hardware.

## Heavy Duty Strap Handles

**\$7.95 ea**

Overall length 250mm. Will lift a maximum weight of 50 kgs! Ideal for speakers, amps, etc. Made in England.  
Cat. HS-8020



## Strap Handle

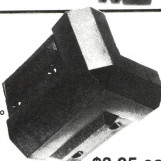
**\$4.95 ea**  
10 or more \$4.50 each

One piece moulded handle. Low cost and very strong. 190mm long.  
Cat. HS-8022



## Plastic Locking Corner Piece

Heavy duty plastic moulded corner fitting featuring male/female inserts. These are designed to fit together so that pieces of equipment (the same size) can be stacked up and locked together. Ideal for stacking speaker boxes.  
Cat. HM-3828



**\$3.95 ea**

10 or more \$3.50 each

## Cabinet Handle

If you are having trouble lifting speaker cabinets, or PA bins, or any large box, try these handles. They are easy to fix. Just drill holes and screw in.  
Cat. HS-8010



**\$16.50 ea**

10 or more \$16.00 each

## PCB Mount Screw Terminal

Ideal for those situations where wires leave a PCB. Just solder the terminal strip to the PCB and connect wires. Will interlock with each other to make longer connectors. For example if you need an 8 way, simply use 2 x3 way and 1 x2 way.

Cat.	No	Type	1-9	10+
HM-3172	2 WAY		\$1.10	\$1.00
HM-3173	3 WAY		\$1.40	\$1.25



## Terminal Strips

**\$1.60 ea**  
10 or more \$1.40 each

12 way moulded terminal strip for mains connections etc. Made of nylon. It can easily be cut into shorter lengths.  
Cat. HM-3200



## Castors

Four castors to suit large speaker boxes or anything for that matter. Drill a 1/4" hole and self tap into wood.

Cat. HP-0835

Note: Castor is actually a Shephard (ball) style not exactly like that shown

**\$5 pkt of 4**



## Plastic Foot

Moulded in tough yet resilient plastic. Enables you to slide heavy equipment across most floors without damaging the floor. 37mm diameter, one screw fitting.  
Cat. HP-0830

**85¢ ea**

10 or more

75¢ each



## 6.5mm Socket Mounting Cup

Ever tried to mount a 6.5mm socket in a wooden box? It was impossible! Now it's easy with our unique bracket.

Cat. HS-8025

**\$1.20**

10 or more

\$1.00 each

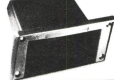


## Pocket Handle

Suitable for chipboard speaker cabinets or metal enclosures. Made in England. Panel cutout 102 x 48mm.  
Cat. HS-8012

**\$2.95 ea**

10 or more \$2.50 each



## Corner Bracket Metal

Keep the corners of your PA bins or party speakers under damaged, just screw these on to your speakers, and start throwing them around!  
Cat. HM-3822

**\$2.50**

10 or more

\$2.25 each



## Dial Drums

Great for experimenters and radio replacements. These quality dial drums are made of Delrin plastic with a brass bush insert and 2 grub screws to retain on shaft.

Size	range from	40mm to	108mm dia.
Cat. HM-3127	40mm dia		\$1.25
Cat. HM-3125	54.1mm dia		\$1.50
Cat. HM-3126	57.3mm dia		\$1.50
Cat. HM-3124	79.5mm dia		\$1.75
Cat. HM-3122	108.3mm dia		\$2.75

DIAL SPRINGS FOR ABOVE

Cat. HM-3090	for small drums 255
Cat. HM-3091	for large drums 256

## Dial Cord 2.5 metre

Dial cord - a 2.5 metre length of top quality nylon cord to get that dial going again. Don't spend money on expensive cord that you'll never use half off!

This pack has more than enough to repair any radio we've ever seen.  
Cat. HP-1400

**\$1.75**

## Tagstrips

Cat. No	Type	1-9	10+
HM-3302	2 lug	25¢	20¢
HM-3304	4 lug	40¢	35¢
HM-3305	5 lug	50¢	45¢



## Perspex

A sheet of clear perspex 150mm x 100mm x 3mm thick. Many uses for the hobbyist.  
Cat. HK-3110

**\$2.95**

## TURN YOUR SURPLUS STOCK INTO CASH!!

Jaycar will purchase your surplus stocks of components and equipment. We are continually on the lookout for sources of prime quality merchandise.

**CALL GARY  
JOHNSTON OR  
BRUCE  
ROUTLEY NOW  
ON  
(02) 747 2022**

**CARLINGFORD 872 4444**

## Phono

2.5mm Subminiature Plug



35¢ ea

Cat. PP-0100 10+ 30¢ ea

2.5mm Socket



50¢ ea

Cat. PS-0105 10+ 45¢ ea

3.5mm Miniature Plug - Black



50¢ ea

Cat. PP-0114 10+ 45¢ ea

3.5mm Open Socket



55¢ ea

Cat. PS-0120 10+ 50¢ ea

3.5mm Enclosed Socket



60¢ ea

Cat. PS-0122 10+ 55¢ ea

3.5mm Mono Panel Insulated Socket



75¢ ea

Cat. PS-0123 10+ 65¢ ea

3.5mm Line Socket



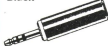
Black Cat. PS-0125

Red Cat. PS-0126

65¢ ea

10+ 60¢ ea

3.5mm Stereo Plug Black



Cat. PP-0130

\$1.40 ea

10+ \$1.30 ea

3.5mm Stereo Chassis Socket



Cat. PS-0132

\$1.40 ea

10+ \$1.30 ea

3.5mm Stereo Line Socket



\$1.60 ea

Cat. PS-0134 10+ \$1.50 ea

6.5mm Mono Phone Line Plug - Black



\$1.10 ea

Cat. PP-0150 10+ \$1.00 ea

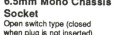
6.5mm Mono Metal Plug



\$2.00 ea

Cat. PP-0154 10+ \$1.85 ea

6.5mm Mono Chassis Socket



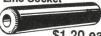
Open switch type (closed when plug is not inserted)



\$1.40 ea

Cat. PS-0160 10+ \$1.30 ea

6.5mm Mono Plastic Line Socket



\$1.20 ea

Cat. PS-0166 10+ \$1.10 ea

6.5mm Stereo Plastic Plug



\$1.25 ea

Cat. PP-0170 10+ \$1.15 ea

6.5mm Stereo Metal Plug



\$2.20 ea

Cat. PP-0174 10+ \$2.00 ea

6.5mm Stereo Right Angle Plug



\$1.65 ea

Cat. PP-0176 10+ \$1.50 ea

6.5mm Stereo PCB Mount Socket



Cat. PS-0180

\$2.20 ea

10+ \$2.00 ea

6.5mm Stereo Enclosed Insulated Switched DPDT Socket



\$1.50 ea

Cat. PS-0182 10+ \$1.35 ea

6.5mm Stereo Enclosed Insulated Switched Socket



\$2.25 ea

Cat. PS-0184 10+ \$2.00 ea

6.5mm Stereo Open Chassis Socket Switched



\$2.25 ea

Cat. PS-0186 10+ \$2.05 ea

6.5mm Stereo Insulated DPST Switched Socket

(Works O.K. in mono)



\$1.95 ea

Cat. PS-0190 10+ \$1.75 ea

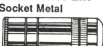
6.5mm Stereo Line Socket Plastic



\$1.40 ea

Cat. PS-0194 10+ \$1.20 ea

6.5mm Stereo Line Socket Metal



\$2.25 ea

Cat. PS-0196 10+ \$2.10 ea

## RCA

Plugs - Plastic



Red Cat. PP-0240

Black Cat. PP-0242

55¢ ea

10+ 50¢ ea

Yellow Cat. PP-0243

White Cat. PP-0244

70¢ ea

10+ 65¢ ea

Metal Plug with spring



\$1.50 ea

Cat. PP-0245 10+ \$1.40 ea

Solderless Plug



\$1.95 ea

Cat. PP-0246 10+ \$1.65 ea

Gold Plug



\$2.50 ea

Cat. PP-0248 10+ \$2.00 ea

Plastic Line Socket



Red Cat. PS-0250

Black Cat. PS-0252

50¢ ea

10+ 45¢ ea

Metal Line Socket



\$1.00 ea

Cat. PS-0254 10+ 90¢ ea

Metal Chassis Socket



90¢ ea

Cat. PS-0256 10+ 80¢ ea

Gold Chassis Socket



\$1.99 ea

Cat. PS-0258 10+ \$1.69 ea

PCB Right Angle Socket Mount



\$1.50 ea

Cat. PS-0259 10+ \$1.40 ea

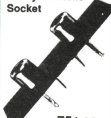
Single Phenolic Socket



36¢ ea

Cat. PS-0262 10+ 30¢ ea

2 Way Phenolic Socket



75¢ ea

Cat. PS-0263 10+ 70¢ ea

4 Way Phenolic Socket

Cat. PS-0265

(Not illustrated)

\$1.50 ea

10+ \$1.35 ea

6 Way Phenolic Socket

Cat. PS-0267

(Not illustrated)

\$2.25 ea

10+ \$2.00 ea

6 Way PCB Mount

Cat. PS-0290

\$3.49 ea

10+ \$2.99 ea

DIN

8 Pin DIN Micro Plug

Suit Macintosh computers

\$8.88 ea

Cat. PS-0290

\$3.49 ea

10+ \$2.75 ea

2 Pin DIN Plug

Cat. PP-0370

\$2.95 ea

10+ \$2.75 ea

3 Pin DIN Plug

Cat. PP-0370

\$2.95 ea

10+ \$2.75 ea

5 Pin DIN Plug

Cat. PP-0370

\$2.95 ea

10+ \$2.75 ea

8 Pin DIN Plug

Cat. PP-0370

\$2.95 ea

10+ \$2.75 ea

12 Pin DIN Plug

Cat. PP-0370

\$2.95 ea

10+ \$2.75 ea

15 Pin DIN Plug

Cat. PP-0370

\$2.95 ea

10+ \$2.75 ea

20 Pin DIN Plug

Cat. PP-0370

\$2.95 ea

10+ \$2.75 ea

25 Pin DIN Plug

Cat. PP-0370

\$2.95 ea

10+ \$2.75 ea

### 5 Pin Line Plug 270°



Cat. PP-0305  
\$1.65 ea  
10+ \$1.50 ea

### 6 Pin Line Plug



Cat. PP-0308  
\$1.65 ea  
10+ \$1.50 ea

### 7 Pin Line Plug



Cat. PP-0310  
\$1.65 ea  
10+ \$1.50 ea

### 8 Pin Line Plug



Cat. PP-0312  
\$1.95 ea  
10+ \$1.80 ea

### 2 Pin Panel Socket



45¢ ea  
Cat. PS-0340 10+ 40¢ ea

### 2 Pin Line Socket



55¢ ea  
Cat. PS-0342 10+ 50¢ ea

### 3 Pin Chassis Socket



Cat. PS-0346  
\$1.40 ea  
10+ \$1.30 ea

### 3 Pin Line Socket



\$1.00 ea  
Cat. PS-0347 10+ 90¢ ea

### 5 Pin Panel Socket



Cat. PS-0348  
\$1.40 ea  
10+ \$1.30 ea

### 5 Pin Right Angle PCB Mount Socket



Cat. PS-0350

\$1.65 ea  
10+ \$1.50 ea

### 5 Pin Line Socket



Cat. PS-0352  
\$1.65 ea  
10+ \$1.50 ea

### 6 Pin Panel Socket



Cat. PS-0354  
\$1.65 ea  
10+ \$1.50 ea

### 6 Pin Line Socket



Cat. PS-0355  
\$1.85 ea  
10+ \$1.70 ea

### 7 Pin Chassis Socket



Cat. PS-0357  
\$1.85 ea  
10+ \$1.70 ea

### 7 Pin Line Socket



Cat. PS-0356  
\$1.85 ea  
10+ \$1.70 ea

### 8 Pin Line Socket



Cat. PS-0358  
\$1.95 ea  
10+ \$1.80 ea

### 8 Pin Chassis Socket



Cat. PS-0359  
\$2.20 ea  
10+ \$2.00 ea

## Banana

### 4mm Plugs



Red Cat. PP-0400  
Black Cat. PP-0402  
65¢ ea  
10+ 60¢ ea

### 4mm Panel Mount Sockets



Red Cat. PS-0406  
Black Cat. PS-0408  
65¢ ea  
10+ 60¢ ea

### 2mm Plug for Multimeters



Red Cat. PP-0412  
Black Cat. PP-0414  
90¢ ea  
10+ 85¢ ea

### 2mm Test Probe for Multimeters



Red Cat. PP-0422  
Black Cat. PP-0424  
\$1.25 ea  
10+ \$1.10 ea

### 4mm Binding Posts Incorporates a Banana socket



Red Cat. PT-0443  
Black Cat. PT-0444  
80¢ ea  
10+ 70¢ ea

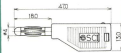
### Deluxe Binding Posts Incorporates a banana socket. Avaliable in a range of colours.



Blue Cat. PT-0450  
Yellow Cat. PT-0451  
White Cat. PT-0452  
Red Cat. PT-0453  
Black Cat. PT-0454  
Green Cat. PT-0455  
\$1.40 ea  
10+ \$1.25 ea

### "Quality" Range of Banana Plugs Piggy back style.

A multimeter probe can be inserted into the back of the plug.



Red Cat. PT-0390  
Black Cat. PT-0391  
\$1.95 ea  
10+ \$1.75 ea

### "Quality" Range of Banana Plugs Flexible Type



Red Cat. PP-0394  
Black Cat. PP-0395  
95¢ ea  
10+ 85¢ ea

## DC Power

### 2.1mm Line Plug



Cat. PP-0510  
60¢ ea  
10+ 55¢ ea

### 2.5mm Line Plug



Cat. PP-0512  
60¢ ea  
10+ 55¢ ea

### 2.1mm Chassis Socket



Cat. PS-0516  
90¢ ea  
10+ 80¢ ea

### 2.5mm Chassis Socket



Cat. PS-0518  
90¢ ea  
10+ 80¢ ea

### 2.1mm Bulkhead Socket



Cat. PS-0522  
\$2.25 ea  
10+ \$2.00 ea

### 2.5mm Bulkhead Socket



Cat. PS-0524  
(same pic as PS-0522)  
\$2.25 ea  
10+ \$2.00 ea

## DC Plug Adaptors

### 2.1mm DC Socket to 1.3mm DC plug



Cat. PA-3670  
\$2.20 ea  
10+ \$2.00 ea

### 2.5mm DC Socket to 1.3mm DC plug



Cat. PA-3672  
\$2.20 ea  
10+ \$2.00 ea

## TV Coax

### 75 Ohm Plastic Line Plug



Cat. PP-0600  
\$1.20 ea  
10+ \$1.00 ea

### 75 Ohm Metal Line Plug



Cat. PP-0602  
\$2.20 ea  
10+ \$2.00 ea

### 75 Ohm Solderless Plug



Cat. PP-0604  
\$2.20 ea  
10+ \$2.00 ea

## 75 Ohm Line Socket



Cat. PS-0610  
\$1.20 ea  
10+ \$1.00 ea

## 75 Ohm Metal Line Socket



Cat. PS-0614  
\$2.20 ea  
10+ \$2.00 ea

## 75 Ohm Plastic Chassis Socket



Cat. PS-0616  
\$1.10 ea  
10+ \$1.00 ea

## 75 Ohm Quality Metal Chassis Mount



Cat. PS-0628  
\$2.25 ea  
10+ \$2.00 ea

## Joiner Female to Female



Cat. PS-0620  
\$1.75 ea  
10+ \$1.60 ea

## Joiner Male to Male



Cat. PS-0622  
\$1.75 ea  
10+ \$1.60 ea

## Coax Cable Joiner Hardwired for 75 & 50 ohm coax.



Cat. PS-0618  
\$1.50 ea  
10+ \$1.30 ea

## F Connectors

### Coax Plug



Cat. PP-0640  
\$1.20 ea  
10+ \$1.08 ea

### Coax Socket



Cat. PS-0642  
\$1.40 ea  
10+ \$1.25 ea

## 300 Ohm TV

### Plug



Cat. PP-0630  
\$1.85 ea  
10+ \$1.75 ea

### Plug and Wall Socket



Cat. PP-0632  
\$3.95 ea  
10+ \$3.70 ea

## BNC

### Male Line Plug



Cat. PP-0650  
\$2.80 ea  
10+ \$2.50 ea

### Male Line Plug Screw terminating



Cat. PP-0652  
\$3.50 ea  
10+ \$3.25 ea

### Male Line Plug Solderless 'Twist On'



Cat. PP-0653  
\$3.50 ea  
10+ \$3.25 ea

## Panel Socket Square Mount



Cat. PS-0656  
\$2.75 ea  
10+ \$2.50 ea

## Panel Socket Single Hole Mount



Cat. PS-0658  
\$2.50 ea  
10+ \$2.25 ea

### Gold Plated Type (as PS-0658)



Cat. PS-0660  
\$4.50 ea  
10+ \$4.00 ea

## BNC Insulated Washers

Packet of 4 Insulating washers for PS-0658

Cat. HP-1220  
\$2.00 per pkt  
10+ \$1.80 pkt

## BNC T Adaptor 1 Female to 2 Female



Cat. PS-3660  
\$7.95 ea  
10+ \$7.50 ea

## BNC T Adaptor 1 Male to 2 Female



Cat. PS-3662  
\$7.95 ea  
10+ \$7.50 ea

## Double Female Panel Mount



Cat. PS-0662  
\$4.50 ea  
10+ \$4.20 ea

## BNC Male to Double Blinding Posts/ Banana Sockets



Cat. PS-3666  
\$9.95 ea  
10+ \$9.50 ea

## BNC Female to Double Banana Plugs



Cat. PS-3668  
\$8.50 ea  
10+ \$8.00 ea

## Twinax

Twin Coax Male Plug (as used on IBM & other computers)



Cat. PP-0670  
\$9.95 ea  
10+ \$8.95 ea

## Twin Coax Chassis Socket (As used on IBM & other computers)



Cat. PS-0672  
\$11.95 ea  
10+ \$10.95 ea

## UHF

PL259 Plug for RG58 coax cable with reducer



Cat. PP-0680  
\$2.95 ea  
10+ \$2.75 ea

PL259 Plug for RG8U (no reducer)



Cat. PP-0682  
\$2.95 ea  
10+ \$2.75 ea

## Reducing Adaptor for PP-0682



Cat. PP-0684  
70¢ ea  
10+ 60¢ ea

## PL259 Solderless Plug



Cat. PP-0683  
\$3.50 ea  
10+ \$3.00 ea



**SO 239 Panel  
Socket Square  
Mount**



Cat. PS-0686  
**\$1.90 ea**  
10+ \$1.85 ea

**Round, Single Hole  
Mount**



Cat. PS-0688  
**\$2.25 ea**  
10+ \$2.10 ea

**Double Female  
Joiner**



Cat. PS-0690  
**\$2.50 ea**  
10+ \$2.30 ea

**"D" Sub-  
miniature**

**Male Solder  
Connectors**

9 Pin



Cat. PP-0800  
**\$2.25 ea**  
10+ \$2.00 ea

15 Pin



Cat. PP-0820  
**\$2.50 ea**  
10+ \$2.25 ea

25 Pin



Cat. PP-0840  
**\$2.95 ea**  
10+ \$2.75 ea

37 Pin



Cat. PP-0860  
**\$7.95 ea**  
10+ \$7.25 ea

**Female Solder  
Connectors**

9 Pin



Cat. PS-0804  
**\$2.75 ea**  
10+ \$2.50 ea

15 Pin



Cat. PS-0824  
**\$2.75 ea**  
10+ \$2.50 ea

25 Pin



Cat. PS-0844  
**\$3.50 ea**  
10+ \$3.20 ea

37 Pin



Cat. PS-0864  
**\$10.95 ea**  
10+ \$9.95 ea

**Right Angle Male  
- PCB Mount  
Solder Terminals**

9 Pin 90° Male

Not Illustrated

Cat. PP-0810

**\$3.45 ea**

10+ \$2.95 ea

15 Pin 90° Male



Cat. PP-0822  
**\$4.25 ea**  
10+ \$3.95 ea



25 Pin 90° Male



Cat. PP-0841

**\$5.75 ea**

10+ \$5.25 ea

**Right Angle  
Female - PCB  
Mount Solder  
Terminals**

9 Pin 90° Female

Not Illustrated

Cat. PP-0812

**\$3.95 ea**

10+ \$3.25 ea

15 Pin 90° Female

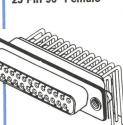
Not Illustrated

Cat. PS-0826

**\$3.50 ea**

10+ \$3.25 ea

25 Pin 90° Female



Cat. PS-0845

**\$6.95 ea**

10+ \$6.50 ea

37 Pin 90° Female

Not Illustrated

Cat. PS-0866

**\$11.95 ea**

10+ \$10.95 ea

**Insulation  
Displacement  
Male**

9 Pin Male



Cat. PP-0802

**\$8.50 ea**

10+ \$8.20 ea

15 Pin Male

Not Illustrated

Cat. PP-0821

**\$8.95 ea**

10+ \$8.50 ea

25 Pin Male



Cat. PP-0842

**\$8.50 ea**

10+ \$8.00 ea

**Insulation  
Displacement  
Female**

9 Pin Female



Cat. PS-0805

**\$8.95 ea**

10+ \$8.20 ea

15 Pin Female

Not Illustrated

Cat. PS-0825

**\$10.95 ea**

10+ \$10.25 ea

25 Pin Female



Cat. PS-0846

**\$9.00 ea**

10+ \$8.50 ea

**Backshells**

9 Pin

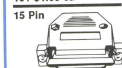
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Cat. PM-0808

**\$1.90 ea**

10+ \$1.80 ea

15 Pin

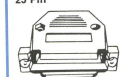


Cat. PM-0828

**\$2.00 ea**

10+ \$1.80 ea

25 Pin



Cat. PM-0848

**\$2.00 ea**

10+ \$1.80 ea

**Hi Quality Chromed  
25 Pin with Finger  
Grip Screws**



Cat. PM-0850

**\$3.50 ea**

10+ \$3.25 ea

37 Pin

Not Illustrated

Cat. PM-0868

**\$4.95 ea**

10+ \$4.50 ea

**Wall Plates**

White plate with one 25D  
cutout



Cat. PM-0857

**\$1.89 ea**

10+ \$1.79 ea

**With 2 Cutouts**



Cat. PM-0858

**\$2.29 ea**

10+ \$2.19 ea

**Centronics**

**Solder Line Plug**



Cat. PP-0890

**\$7.50 ea**

10+ \$7.00 ea

**Insulation  
Displacement Line  
Plug**



Cat. PP-0892

**\$8.50 ea**

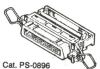
10+ \$8.00 ea

## Panel Line Solder Socket



Cat. PP-095  
\$9.95 ea  
10+ \$9.50 ea

## Insulation Displacement Line Socket



Cat. PS-096  
\$12.50 ea  
10+ \$11.50 ea

## Amphenol Series 57 Micro Ribbon Chassis Sockets 14 Way



Cat. PS-0902  
\$3.00 ea  
10+ \$2.50 ea

## IDC Connectors

### IDC Header with Relief Strain



16 Way  
Cat. PP-0945  
\$4.25 ea  
10+ \$3.85 ea

26 Way  
Cat. PP-0947  
\$5.50 ea  
10+ \$5.00 ea

34 Way  
Cat. PP-0948  
\$5.50 ea  
10+ \$5.00 ea

## 50 Way

Cat. PP-0950

\$6.95 ea

10+ \$6.50 ea

## IDC Header Right Angle with Strain Relief



16 Way  
Cat. PP-0965  
\$4.25 ea  
10+ \$3.85 ea

26 Way  
Cat. PP-0967  
\$4.95 ea  
10+ \$4.50 ea

34 Way  
Cat. PP-0968  
\$6.25 ea  
10+ \$6.00 ea

50 Way  
Cat. PP-0970  
\$10.95  
10+ \$10.50

## IDC Line Socket



14 Way  
Cat. PP-0983  
\$2.00

16 Way  
Cat. PS-0985  
\$4.75 ea  
10+ \$4.55 ea

26 Way  
Cat. PS-0987  
\$5.25 ea  
10+ \$5.00 ea

34 Way  
Cat. PS-0988  
\$5.75 ea  
10+ \$5.50 ea

50 Way  
Cat. PS-0990  
\$7.50 ea  
10+ \$7.00 ea



## Economy IDC Right Angle Connector



16 Way  
Cat. PP-0992  
\$3.50 ea  
10+ \$3.25 ea

26 Way  
Cat. PP-0993  
\$3.25 ea  
10+ \$3.10 ea

34 Way  
Cat. PP-0994  
\$5.50 ea  
10+ \$5.20 ea

50 Way  
Cat. PP-0996  
\$7.95 ea  
10+ \$7.50 ea

## IDC Edge Connector

For Connecting to PCB's and Disc Drives

34 Way

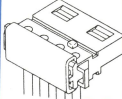


Cat. PI-6560  
\$9.50 ea  
10+ \$8.50 ea



## 4 Pin Disc Drive Plug

Insulation Displacement type with positive locking cover which insulates termination area and acts as a strain relief.



Cat. PP-0920  
\$6.50 ea  
10+ \$6.00 ea

## Scart

Plug 21 Pins



Cat. PP-0910  
\$4.75 ea

## Computer Leads

25 Way "D" Male to Male - 1.8 metre



Cat. PL-0855  
\$32.95

25 Way "D" Female to Male - 1.8 metre  
Cat. PL-0856

\$30.95

25 Way "D" Male to Centronics Plug - 1.8 metre



Cat. PL-0854  
\$28.95

## Cannon

XLP/AXR Type 3 Pin Line Male



Cat. PP-1024  
\$5.25 ea  
10+ \$5.00 ea

3 Pin Line Female



Cat. PS-1032  
\$5.50 ea  
10+ \$5.20 ea

3 Pin Chassis Male (Plug)



Cat. PP-1020  
\$4.25 ea  
10+ \$4.00 ea

3 Pin Chassis Female (Socket)



Cat. PS-1030  
\$5.95 ea  
10+ \$5.75 ea

3 Pin Plastic Chassis Male



Cat. PP-1016  
\$3.95 ea  
10+ \$3.70 ea

3 Pin Plastic Chassis Female



Cat. PS-1018  
\$3.95 ea  
10+ \$3.70 ea

5 Pin Line Male



Cat. PP-1052  
\$8.95 ea  
10+ \$8.25 ea

COUNTRY ORDERS 008 022 888

### 5 Pin Line Female



Cat. PS-1058  
\$13.95 ea  
10+ \$13.00 ea

### 5 Pin Chassis Male (Plug)



Cat. PP-1050  
\$7.95 ea  
10+ \$7.50 ea

### 5 Pin Chassis Female (Socket)



Cat. PS-1056  
\$13.95 ea  
10+ \$13.00 ea

240V (5A)  
Chassis Male  
Recessed pins - inside tube  
Type AXL-LNE 32



Cat. PP-1000  
\$8.95 ea  
10+ \$8.50 ea

240V (5A) Female  
Recessed pins in hole - to  
suit above product  
Type AXL-LNE 11C  
Not illustrated  
Cat. PS-1002  
\$9.95 ea  
10+ \$9.00 ea

## Telephone

### Telecom Type Plug



Cat. PP-1400  
\$3.95 ea  
10+ \$3.50 ea

### Telecom Type Socket



Cat. PS-1410  
\$4.50 ea  
10+ \$4.25 ea

## Multi Pin

2 Pin McMurdo  
Speaker Type Plug  
(polarised)



Cat. PP-1200  
95¢ ea  
10+ 85¢ ea

### Socket Panel Mount



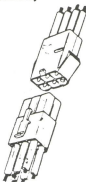
Cat. PS-1202  
65¢ ea  
10+ 60¢ ea

Utilux Moulded Nylon  
Line Plug & Socket  
Included in the assembly along  
with pins of both sex.

2 Pin Plug/Socket  
Assembly  
Cat. PP-2020  
\$1.95 ea  
10+ \$1.85 ea

3 Pin Plug/Socket  
Assembly  
Cat. PP-2022  
\$2.50 ea  
10+ \$2.30 ea

6 Pin Plug/Socket  
Assembly



Cat. PP-2024  
\$3.20 ea  
10+ \$3.00 ea

### 12 Pin Plug/Socket Assembly

Cat. PP-2026  
\$4.50 ea  
10+ \$4.25 ea

### Microphone Line Socket 4 Pin



Cat. PS-2012  
\$3.95 ea  
10+ \$3.50 ea

### Microphone Panel Plug 4 Pin



Cat. PP-2010  
\$3.50 ea  
10+ \$3.25 ea

### Octopus 8 Pin Plug



Cat. PP-2080  
\$3.95 ea  
10+ \$3.70 ea

### Octopus Chassis Socket



Cat. PS-2082  
\$3.95 ea  
10+ \$3.70 ea

### Cigarette Lighter Plug

Simply plugs into the car cigar/  
cigarette lighter socket to  
obtain 12V DC from the car  
battery



Cat. PP-2000  
\$1.20 ea  
10+ \$1.10 ea

### Cigarette Lighter Plug - Fused

As PP-2000 but with the added  
safety benefit of being fused



Cat. PP-2001  
\$2.95 ea  
10+ \$2.70 ea

### Cigarette Lighter Chassis Socket



Cat. PS-2002  
\$6.95 ea  
10+ \$6.50 ea

### Cigarette Lighter Inline Socket



Cat. PS-2003  
\$2.20 ea  
10+ \$2.00 ea

### Car Radio Antenna Plug



Cat. PP-2040  
95¢ ea  
10+ 85¢ ea  
Car Radio Socket  
Chassis Mount



Cat. PS-2042  
95¢ ea  
10+ 85¢ ea

### 3 Pin Plug & Socket suited for low voltage and speakers

### Pin Plug and Chassis Socket



Cat. PS-2092  
\$1.50 ea  
10+ \$1.35 ea

### 3 Pin Line Plug and Socket



Cat. PM-2700  
\$1.50 ea  
10+ \$1.35 ea

## Speaker Terminals

### 2 Way Push Connection



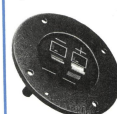
Cat. PT-3000  
\$1.60 ea  
10+ \$1.50 ea

### 4 Way Push Connection



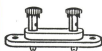
Cat. PT-3002  
\$2.60 ea  
10+ \$2.40 ea

### Large Round Speaker Terminal



Cat. PT-3004  
\$2.50 ea  
10+ \$2.25 ea

## 2 Way Screw Down Speaker Terminals



Cat. PT-3008  
**\$1.00 ea**  
10+ 80c ea

## PCB Mount Safety Speaker Connectors

The bare wires simply inserted and the plastic shroud twisted



Cat. PT-3010  
**\$3.95 ea**  
10+ \$3.65 ea

## Screw Terminals on Phenolic 2 Way



Cat. PT-3040  
**40c ea**  
10+ 35c ea

## 4 Way



Cat. PT-3042  
**65c ea**  
10+ 55c ea

## Mains Connectors

### 240V Line Plug



Cat. PT-4000  
**\$1.95 ea**  
10+ \$1.75 ea

### 240V Piggy Back Plug



Cat. PT-4002  
**\$3.95 ea**  
10+ \$3.65 ea



## IEC320 Chassis 240V Plug



Cat. PP-4005  
**\$2.95 ea**  
10+ \$2.45 ea

## IEC Male Chassis Socket with Fuse

**88**



Cat. PP-4004  
**\$5.95 ea**  
10+ \$5.50 ea

## IEC320 240V Female Line Socket



Cat. PS-4006  
**\$3.75 ea**  
10+ \$3.50 ea

## 240V Mains Line Socket



Cat. PS-4008  
**\$4.20 ea**  
10+ \$4.00 ea

## Double Adaptor



Cat. PP-4032  
**\$3.75 ea**  
10+ \$3.60 ea

## BB Connector

Used to connect mains wiring inside junction boxes, etc.

Cat. PP-4060  
**20c ea**  
10+ 18c ea

## Mains Surface Mount Socket



Cat. PS-4012  
**\$3.95 ea**  
10+ \$3.50 ea

## IEC Power Leads

IEC320 style plugs, sockets, cord, etc. Jaycar stocks a range of EA approved mains line cords. We have them in straight entry, left and right entry with and without standard 240V mains moulded plug. Each cord is a generous 2 metres long and is rated at 7.5 amps continuous. They are only available in grey.

### Line Cord Straight Entry

Cat. PS-4100  
**\$5.95 ea**  
10+ \$5.50 ea

### Line Cord Right Hand Entry

Cat. PS-4102  
**\$5.95 ea**  
10+ \$5.50 ea

### Line Cord Left Hand Entry

Cat. PS-4104  
**\$5.95 ea**  
10+ \$5.50 ea

### Line Cord Straight Entry with 240V Plug

Cat. PS-4106  
**\$7.95 ea**  
10+ \$7.50 ea



## Power Leads

### 3 Pin AC Plug

with 2 metres 3 core cable to bare ends



Cat. PS-4110  
**\$3.50 ea**  
10+ \$3.25 ea



## Cassette Power Leads

all 2 metres long

### Type 1

Cat. PS-4115



### Type 2

Cat. PS-4116



### Type 3

Cat. PS-4117



### Type 4

Cat. PS-4118



**ALL \$5.95 ea**

## Quick Connect

### Female Spade Lug



Cat. PT-4507  
**\$1.25 pkt 8**  
10+ \$1.10

### Male Spade Lug



Cat. PT-4509  
**\$1.25 pkt 8**  
10+ \$1.10

### Spade Lug Adaptor



Cat. PT-4512  
**\$1.25 pkt 6**  
10+ \$1.15

### Eye Terminal



Cat. PT-4514  
**\$1.25 pkt 8**  
10+ \$1.15

### Mini Female Spade Lug



Cat. PT-4520  
**\$1.65 pkt 15**  
10+ \$1.50

## Forked Spade



Cat. PT-4523  
**\$1.25 pkt 8**  
10+ \$1.10

## Large Forked Spade



Cat. PT-4524  
**\$1.25 pkt 8**  
10+ \$1.10

## Bullet Connector Male Insulated



Cat. PT-4500  
**\$2.50 pkt 10**  
10+ \$2.25

## Bullet Connector Female Insulated



Cat. PT-4502  
**\$2.50 pkt 10**  
10+ \$2.25

## Forked Spade Deluxe

Quality solder type (open eyelet) screw on plastic body, heavy gauge plated



Red Cat. PT-4600  
Black Cat. PT-4610  
**40c ea**  
10+ 35c ea

## Eye Terminal



Cat. PT-4516  
**\$1.00 pkt 20**

## Slotted Terminal



Cat. PT-4526  
**\$1.20 pkt 20**

## "Molex" Pins

Make your own IC (or other) sockets to any length! Will take up to 0.5mm diameter wire or pins. Simply insert and break off carrier strip.



Cat. PI-6541  
**\$4.50 pkt 100**  
Cat. PI-6543  
**\$35.00 pkt 1000**



## Machine Pin IC Socket Strips

What a great idea. If you are a serviceman or hobbyist you don't have to keep every size of IC socket handy. Just keep a few of these and snap them off to make any length.

• Quality machine pins

• 32 pins per length

Cat. PI-6470

**\$3.20 per length**

10+ \$3.00



## IC Sockets

### West German Production IC Sockets

Gold insert machined pin, anti-wicking, very high quality. Ideal for professional/portable or field service equipment.

Cat. PI-6452	8 PIN	\$1.00 ea - 10+ 90¢ ea
Cat. PI-6454	14 PIN	\$1.35 ea - 10+ \$1.25 ea
Cat. PI-6456	16 PIN	\$1.50 ea - 10+ \$1.35 ea
Cat. PI-6458	18 PIN	\$1.65 ea - 10+ \$1.50 ea
Cat. PI-6460	20 PIN	\$1.90 ea - 10+ \$1.80 ea
Cat. PI-6462	22 PIN	\$2.00 ea - 10+ \$1.85 ea
Cat. PI-6464	24 PIN	\$2.30 ea - 10+ \$2.10 ea
Cat. PI-6466	28 PIN	\$2.60 ea - 10+ \$2.40 ea
Cat. PI-6468	40 PIN	\$3.25 ea - 10+ \$3.00 ea

ALL GOLD INSERT MACHINED PIN



### Production (Low Cost) IC Sockets PCB Mount

#### Solder Tail

Cat. PI-6500	8 PIN	20¢ ea - 10+ 18¢ ea
Cat. PI-6501	14 PIN	25¢ ea - 10+ 22¢ ea
Cat. PI-6502	16 PIN	28¢ ea - 10+ 25¢ ea
Cat. PI-6503	18 PIN	32¢ ea - 10+ 28¢ ea
Cat. PI-6504	20 PIN	48¢ ea - 10+ 44¢ ea
Cat. PI-6505	22 PIN	50¢ ea - 10+ 45¢ ea
Cat. PI-6506	24 PIN	50¢ ea - 10+ 45¢ ea
Cat. PI-6507	28 PIN	70¢ ea - 10+ 65¢ ea
Cat. PI-6508	40 PIN	70¢ ea - 10+ 65¢ ea

All tin plated Phosphor Bronze or Beryllium Copper.



### Header Plugs

\*Header Plugs\* will plug into a standard IC socket. They will allow you to solder components into a circuit via the IC socket.

14 Pin Cat. PI-6524	\$2.50 ea 10+ \$2.20 ea
16 Pin Cat. PI-6525	\$2.50 ea 10+ \$2.40 ea
24 Pin Cat. PI-6526	\$3.95 ea 10+ \$3.70 ea



### ZIF (Zero Insertion Force) Sockets

24 Pin Cat. PI-6522	\$21.95 ea 10+ \$20.50 ea
28 Pin Cat. PI-6523	\$23.95 ea 10+ \$22.50 ea



### Wire Wrap Machined IC Sockets

These high quality wire wrap sockets have machined pins. Now wire wrap users can have the BEST sockets at a reasonable price.

Cat. PI-6491	8 PIN	\$1.75 ea - 10+ \$1.65 ea
Cat. PI-6492	14 PIN	\$2.65 ea - 10+ \$2.50 ea
Cat. PI-6493	16 PIN	\$3.25 ea - 10+ \$3.10 ea
Cat. PI-6494	18 PIN	\$3.40 ea - 10+ \$3.20 ea
Cat. PI-6495	20 PIN	\$3.50 ea - 10+ \$3.30 ea
Cat. PI-6496	22 PIN	\$3.85 ea - 10+ \$3.60 ea
Cat. PI-6497	24 PIN	\$4.40 ea - 10+ \$4.15 ea
Cat. PI-6498	28 PIN	\$4.95 ea - 10+ \$4.65 ea
Cat. PI-6499	40 PIN	\$6.50 ea - 10+ \$6.20 ea



NEW FOR 88

## Insulation Displacement Type Header Plugs

### 14 Way Gold Plated

Cat. PI-6549

**\$1.95 ea**

10+ \$1.75 ea

### 16 Way Gold Plated

Cat. PI-6550

**\$2.25 ea**

10+ \$2.00 ea

### 24 Way Gold Plated

Cat. PI-6555

**\$3.95 ea**

10+ \$3.70 ea

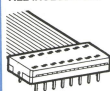
### 40 Way

Cat. PI-6558

**\$4.95 ea**

10+ \$4.60 ea

ALL INCLUDE CAP



### IC Sockets - Packs

The economical way to buy quality tinned IC sockets

#### 100 x 8 PIN

Cat. PI-6478

**\$15.50**

#### 100 x 14 PIN

Cat. PI-6480

**\$16.95**

#### 100 x 16 PIN

Cat. PI-6482

**\$19.95**

#### 100 x 18 PIN

Cat. PI-6484

**\$23.95**

### Mixed Pack IC Sockets

Consists of:

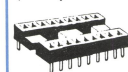
- 15 x 8 pin
- 20 x 14 pin
- 20 x 16 pin
- 10 x 18 pin
- 5 x 20 pin
- 10 x 22 pin
- 5 x 24 pin
- 5 x 28 pin
- 10 x 40 pin

More of the more common values.

Cat. PI-6490

(\$37.00 value)

**\$24.95 pkt of 100**



## Battery Holders - Snaps

Jaycar carries an excellent range of battery connectors. In line with our usual policy our products are higher quality than average but cost no more. The holders are moulded in Delryn with corrosion resistant nickel plated springs and studs.

### AA, UN-3 or Penlight Cells

#### 4 x AA Square



Cat. PH-9200

**90¢ ea**

10+ 80¢ ea

#### 2 x AA Side By Side



Cat. PH-9202

**\$1.00 ea**

10+ 90¢ ea

#### 4 x AA Side By Side & End To End



Cat. PH-9204

**\$1.20 ea**

10+ \$1.00 ea

#### 6 x AA 2 By 3 Side By Side



Cat. PH-9206

**\$1.20 ea**

10+ \$1.00 ea



#### 8 x AA 2 Rows of 4 Square



Cat. PH-9208

**\$1.20 ea**

10+ \$1.00 ea



#### 9V Or 216 Type Cells



Cat. PH-9210

**\$1.50 ea**

10+ \$1.30 ea



#### Standard Snap-On



Cat. PH-9230

**35¢ ea**

10+ 30¢ ea

## C or UM-2 Cells

1 x C Cell



Cat. PH-9210

**\$1.45 ea**

10+ \$1.25 ea

## 4 x C Cell 2 Rows Of 2 End To End



Cat. PH-9216

**\$1.85 ea**

10+ \$1.60 ea

## D Or UM-1 Cells

1 x D Cell



Cat. PH-9218

**\$1.20 ea**

10+ \$1.00 ea

## 2 x D Cell Side By Side



Cat. PH-9220

**\$1.85 ea**

10+ \$1.60 ea

## 4 x D Cell 2 Rows Of 2

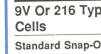


Cat. PH-9222

**\$2.00 ea**

10+ \$1.75 ea

## 9V Or 216 Type Cells



Cat. PH-9230

**\$1.50 ea**

10+ 30¢ ea



Cat. PH-9230

**35¢ ea**

10+ 30¢ ea

Plugs & Sockets

HURSTVILLE 570 7000

## Button Cell Battery Holder

- PCB Mount
- Will take all common silver oxide cells + small lithium batteries etc.
- Gold plated contacts



Cat. PH-9235

**\$3.95 ea**  
10+ \$3.50 ea

## PCB Mount 9V Holder

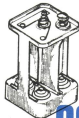


Cat. PH-9234

**\$3.75 ea**

## "Lantern" Type Torch Battery replacement Holder

Replace expensive lantern batteries with this holder and use 4 x D size instead.



Cat. PH-9238

**\$6.50 ea**

**Fahne Stock Clips**  
Screw on battery terminal. Clip holds wire down firmly. Nickel plated steel spring.



Cat. PH-9245

**\$2.00 pkt 4**

## Edge Connector

**Commodore Edge Connector**



Cat. PA-0888

**\$6.95 ea**  
10+ \$6.50 ea

## Pin Headers

### Pin Headers & Socket Terminal Strips For PCB's

Great for PCB mass terminals

### Vertical Launcher 0.1" Pitch 8 Way



Cat. HM-3210

**\$1.50 ea**  
10+ \$1.40 ea

### Right Angle Launcher 0.1" Pitch 3 Way



Cat. HM-3213

**75¢ ea**  
10+ 65¢ ea

### 4 Way

Not illustrated

Cat. HM-3214

**95¢ ea**  
10+ 85¢ ea

### 8 Way



Cat. HM-3215

**\$1.85 ea**  
10+ \$1.75 ea

### 8 Way Connector Socket

Not illustrated

Cat. HM-3220

**\$1.75 ea**  
10+ \$1.65 ea

## Wire Wrap Pins

Both pins will take three levels of wrap, are 0.025" (0.63mm) square and heavily gold plated. The HM-3712 is a single sided pin terminated at the short end with a slot. Supplied in packs of 20.



**88**  
NEW FOR

Cat. HM-3712

**\$2.95 pkt 20**  
10+ \$2.75



This is a double ended pin with a thicker section 2/3 down the length of the pin. The thicker section is meant to make an interference fit in a PCB (Drill a 0.8 - 0.9mm hole in the PCB)



Cat. HM-3714

**\$3.50 pkt 20**  
10+ \$3.30

## PCB Pins

Pins and sockets for easy termination of wire on PCB boards.

Pins - 0.9mm



Cat. HP-1250

**\$1.90 pkt 50**  
10+ \$1.70

### Socket to suit HP-1250



Cat. HP-1260

**\$3.25 pkt 25**  
10+ \$3.00

## Crystal Socket

Socket to suit small size crystals



Cat. PS-1300

**60¢ ea**  
10+ 55¢ ea

## Contact Connectors

Pack of 2 easy to use automatic connectors. Simply wrap around the existing wire and new wire and squeeze. Connector cuts through insulation and makes contact without damaging the conductor. Fully insulated once on.



Cat. HP-1206

**\$1.25 pkt 4**

## TO-3 Insulating Kit

Mica washers and bushes for TO-3 style



Cat. HP-1122

**\$1.30 pkt 4**  
10+ \$1.20

Cat. HP-1120

**\$24.95 pkt 100**  
10+ \$23.00

## TO-3 Cover

Made of black plastic to cover TO-3 transistors mounted on the outside of cases.



Cat. ZM-9902

**50¢ ea**  
10+ 45¢ ea

## TO-220 Insulating Kit

Mica washers and bushes for TO-220 or any flat pack transistor



Cat. HP-1142

**95¢ pkt 4**  
10+ 85¢

Cat. HP-1140

**\$14.50 pkt 100**  
10+ \$13.50

## Transistor Socket

**TO-3 Economy Phenolic Type**



Cat. PS-2300

**40¢ ea**  
10+ 35¢ ea

## Car Aerial Extension Leads

**1 Metre**

Cat. AA-2094  
**\$4.95 ea**

**3.5 Metre**

Cat. AA-2096  
**\$8.95 ea**



## Car Radio Antenna

### Standard Lockdown

Replacement car radio antenna complete with plug and lead, 4 stage, 820mm long with 2 keys.

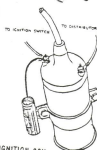


Cat. AA-2090

**\$7.95 ea**

## Car Radio Suppression

### Condensor Noise Suppressor



IGNITION COIL

Cat. AA-3060

**\$1.75 ea**  
10+ \$1.50 ea

## Hot Line Filter

- For CB radio and tape players
  - Eliminates or reduces ignition noise thru "hot" wire or positive lead to battery
  - Complete with capacitor
- Cat. AS-3070  
**\$7.95 ea**



## CB Base

Standard 3/8" base for mounting helical whip on a fender



Cat. DC-3060  
**\$5.50 ea**

## Audio/Video Adaptors

**3.5mm Plug to RCA Socket**



Cat. PA-3500  
**\$1.95 ea**  
10+ \$1.80 ea

**6.5mm Plug to 3.5mm Socket**



Cat. PA-3504  
**\$1.95 ea**  
10+ \$1.80 ea

**3.5mm Plug to 6.5mm Socket**



Cat. PA-3506  
**\$1.95 ea**  
10+ \$1.80 ea

**RCA Plug to 3.5mm Socket**



Cat. PA-3508  
**\$1.95 ea**  
10+ \$1.80 ea

**RCA Plug to 6.5mm Socket**



Cat. PA-3510  
**\$1.95 ea**  
10+ \$1.80 ea

**Mic Connector to RCA Socket**



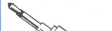
Cat. PA-3512  
**\$1.95 ea**  
10+ \$1.80 ea

**Dual 3.5mm Stereo Plug to 2 x 3.5mm Stereo Sockets**



Cat. PA-3562  
**\$4.95 ea**  
10+ \$4.75 ea

**3.5mm Plug to 3.5mm Stereo Socket**



Cat. PA-3584  
**\$1.95 ea**  
10+ \$1.80 ea

**3.5mm Stereo Plug to 6.5mm Stereo Socket**



Cat. PA-3586  
**\$1.95 ea**  
10+ \$1.80 ea

**6.5mm Mono Plug to 6.5mm Stereo Socket**



Cat. PA-3588  
**\$1.95 ea**  
10+ \$1.80 ea

**6.5mm Stereo Plug to 3.5mm Stereo Socket**



Cat. PA-3590  
**\$1.95 ea**  
10+ \$1.80 ea

**6.5mm Plug to RCA Socket**



Cat. PA-3592  
**\$1.95 ea**  
10+ \$1.80 ea

**3.5mm Plug to 6.5mm Stereo Socket**



Cat. PA-3594  
**\$1.95 ea**  
10+ \$1.80 ea

**6.5mm Stereo Plug to 2 x 6.5mm Stereo Sockets**



Cat. PA-3596  
**\$4.95 ea**  
10+ \$4.75 ea

**6.5mm Stereo Plug to 2 x 3.5mm Stereo Sockets**



Cat. PA-3597  
**\$4.95 ea**  
10+ \$4.75 ea

**RCA Socket to RCA Socket**



Cat. PA-3598  
**\$1.95 ea**  
10+ \$1.80 ea

**RCA Plug to 2 x RCA Socket**



Cat. PA-3560  
**\$4.95 ea**  
10+ \$4.75 ea

**PL259 Plug to RCA Socket**



Cat. PA-3560  
**\$3.95 ea**  
10+ \$3.75 ea

**PL259 Plug to BNC Socket**



Cat. PA-3652  
**\$4.95 ea**  
10+ \$4.75 ea

**BNC Plug to RCA Socket**



Cat. PA-3654  
**\$4.95 ea**  
10+ \$4.75 ea

**SO239 Socket to BNC Plug**



Cat. PA-3656  
**\$4.95 ea**  
10+ \$4.75 ea

**RCA Plug to BNC Female**



Cat. PA-3655  
**\$4.95 ea**  
10+ \$4.75 ea

## Audio Leads

**5 Pin DIN Plug to 5 Pin DIN Plug**



Cat. WA-1000  
**\$4.50**

**5 Pin DIN Plug to 4 RCA Plugs**



Cat. WA-1002  
**\$6.50**

**4 RCA Plugs to 4 RCA Plugs**



Cat. WA-1003  
**\$6.95**

**2 RCA Plugs to 2 RCA Plugs**



Cat. WA-1042  
**\$4.95**

**RCA Plug to RCA Plug**



Cat. WA-1016  
**\$2.95**

**Curly Cord**

1.8 metres 3 conductor curly cord for microphone replacements etc.



Cat. WA-1090  
**\$5.50**

**6.5mm Stereo Plug to 6.5mm Stereo Socket Curly Cord**



Cat. WA-1005  
**\$7.95**

*Plugs & Sockets*

## Heatshrink Tubing

Jaycar proudly introduces a new range of high quality heatshrink tubing from Japan. Available in two colours, both in one metre lengths with an extended range of sizes over last year's range. Our new range can be shrunk with a match. Simply place the heatshrink over the item to be insulated or protected and heat to form a permanent covering.

- New colour
- New sizes
- Shrink with a match
- Remains flexible after shrink

1.5mm Red WH-5540 \$1.75

2.5mm Red WH-5541 \$1.75

3.5mm Red WH-5542 \$1.85

5mm Red WH-5543 \$1.95

7mm Red WH-5544 \$2.10

10mm Red WH-5545 \$2.25

16mm Red WH-5547 \$3.25

SOLD IN 1 METRE LENGTHS  
SHRINKS TO 1/2 SIZE



88  
NEW FOR

## Assorted Heatshrink Pack

Handy assortment of our new high quality heatshrink tubing in red and black. Sizes from 1.5mm to 10mm.

10 pieces in all of 300 & 150mm length.

**GREAT VALUE**

Cat. WH-5525

**\$6.95**



88  
NEW FOR

## Old Style Heatshrink



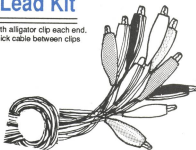
We still have some of the old style heatshrink left. These are available at reduced prices until sold out. Will not shrink with a naked flame. Supplied in a flat style which is easily opened up.

Cat.	Style	Length	Old Price	SPECIAL PRICE
WS-5516	Flat	2 metres	\$3.95	\$2.50
WS-5518	Flat	2 metres	\$3.95	\$2.75
WS-5520	Flat	2 metres	\$4.95	\$3.50
WS-5510	Assorted Pack		\$4.95	\$3.50

## Jumper Lead Kit

10 x 380mm leads, with alligator clip each end. 5 different colours. Thick cable between clips so they won't break.  
Cat. WC-6010

**\$5.95**



## Video Leads & Adaptors

88  
NEW FOR

**Coax TV Plug to RCA Socket**

Cat. PA-3675

**\$2.50 ea**

10+ \$2.25 ea



**Coax TV Socket to RCA Socket**

Cat. PA-3676

**\$2.50 ea**

10+ \$2.25 ea



**BNC - BNC**

1.5 metres

Cat. AV-6510

**\$8.50 ea**

3 metres length

Cat. AV-6511

**\$11.50 ea**



**BNC - PL259**

1.5 metres

Cat. AV-6512

**\$7.95 ea**



**PL259 - PL259**

1.5 metre

Cat. AV-6514

**\$7.95 ea**



**RCA - PL259**

1.5 metre

Cat. AV-6516

**\$5.95**



**BNC - RCA**

1.5 metre

Cat. AV-6521

**\$7.95**

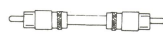


**RCA - RCA**

1.5 metre

Cat. AV-6518

**\$4.95**



**5 Pin DIN Reverse Lead**

1.5 metre

Cat. AV-6532

**\$5.95**



## Stereo Adaptor Lead Kit

Enables you to patch virtually any VCR to another. Contains plug adaptors, leads, etc.

Cat. AV-6538

**\$24.50**



See plug and socket section for other leads and adaptors



## Shielded Audio Cable

Single shielded PVC covered, light duty cable. Ideal for patch cords, small microphones, amplifier wiring, etc. Grey in colour.  
Cat. WB-1500

**35¢ metre**

**\$29 per 100 metre roll**

## Fig.8 Twin Screened

Two grey PVC covered individually shielded conductors. Screens electrically separated.  
Cat. WB-1502

**60¢ metre**

**\$50 per 100 metre roll**

## Round

Twin screened pair (not balanced). Enclosed in a thick wall PVC jacket.  
Cat. WB-1504

**60¢ metre**

**\$50 per 100 metre roll**

## Round

4 conductors each shielded and encased in one PVC covering. Ideal for DIN plug and socket wiring.  
Cat. WB-1510

**\$1.25 metre**

**\$100 per 100 metre roll**

## Low Capacitance

Special single screen low capacitance audio cable. Suitable for high quality amplifiers. As used in our ET1 Black Monolith MOSFET power amplifier. Blue in colour.  
Cat. WB-1530

**\$1.70 metre \$130 per 100 metre roll**

## 300 Ohm TV Ribbon

The standard flat clear ribbon used by so many for so long. Suitable for indoor and outdoor, low loss and maintains perfect balance.  
Cat. WB-1800

**25¢ metre**

**\$20 per 100 metre roll**

## 75 Ohm Light Duty TV Coax

Designed for colour TV aerial systems. Suitable for up to 400MHz. Black insulation and braided shield.  
Cat. WB-2000

**80¢ metre**

**\$60 per 100 metre roll**

## 75 Ohm Heavy Duty TV Coax

As above but heavier gauge. Suitable for long runs and general lower loss. 2.6dB less loss per 100 feet than WB-2000.  
Cat. WB-2004

**\$1.00 metre**

**\$85 per 100 metre roll**

## 75 Ohm Air Spaced High Quality TV Coax

SPECIFICATIONS:  
O.D. 6.5MM, S cell P.E. dielectric, aluminium/Mylar foil shield and 48/0.12mm copper braid giving 100% shielding, dB loss per 100 metres 50MHz/5.4dB, 200MHz/9.2dB, 470MHz/14.4dB, 700MHz/17.7dB, 800MHz/19.9dB. Capacitance (1kHz) 5.5nF.  
Cat. WB-2006

**\$1.20 metre**

**\$100 per 100 metre roll.**



## Fig 8 White 240V Power Flex



Figure 8 wire, white in colour, suited for lights and general 240V work not requiring an earth. Rated at 7.5 amp  
Cat. WB-1560

**60¢ metre**

**\$55 per 100 metre roll**

## Three Core Mains



Standard 240V 3 core grey 10 amp power cable. For all your mains wiring.  
Cat. WB-1562

**\$1.30 metre**

**\$120 per 100 metre roll**

## Light Duty Fig 8 Speaker

Ideally suited for Hi Fi systems, intercoms, etc. One conductor marked so polarity is not reversed. Grey with black trace. 14 x 0.14mm.  
Cat. WB-1702

**25¢ metre**

**\$19 per 100 metre roll**

## Medium Duty Fig 8

Suited to amplifiers up to 150 watts. Size 19 x 0.19mm. One side has trace for correct polarity connection.  
Cat. WB-1706

**40¢ metre**

**\$30 per 100 metre roll**

## Heavy Duty Fig 8

Suited for speaker systems above 150 watts. Colour coded.  
Cat. WB-1708

**45¢ metre**

**\$33 per 100 metre roll**

## Jumbo Speaker Cable

For the audiophile who wants the best of speaker cable. Figure 8, 259 strands in each side, DC resistance 0.003 ohms per foot. Inductance 0.23uH per foot. You can hear the difference.  
Cat. WB-1732

**\$3.50 metre**

**\$280 per 100 metre roll**

## Flexible Light Duty Hook-up Wire

13 x 0.12mm  
Suited for all general purpose wiring work. 8 different colours available.  
Cat. WH-3010 RED  
Cat. WH-3011 BLACK  
Cat. WH-3012 BROWN  
Cat. WH-3013 ORANGE  
Cat. WH-3014 YELLOW  
Cat. WH-3015 GREEN  
Cat. WH-3016 BLUE  
Cat. WH-3017 WHITE

**14¢ metre**

**\$8 per 100 metre roll**

## Flexible Light Duty Hook-up Wire - 25m Rolls

Now all hobbyists can afford to have a roll of each colour hook-up wire by their work bench. Quality 13/0.12 tinned hook-up wire on plastic spools.  
Red Cat. WH-3000  
Yellow Cat. WH-3004  
Black Cat. WH-3001  
Green Cat. WH-3005  
Brown Cat. WH-3002  
Blue Cat. WH-3006  
Orange Cat. WH-3003  
White Cat. WH-3007

**\$2.95 per reel**

**BUY ONE ROLL OF EACH COLOUR - 8 ROLLS IN ALL FOR ONLY \$19.95**

Cat. WH-3009



## Heavy Duty

24 x 0.2mm  
Suited for 250V wiring and general heavy duty work. Rated 7.5 amps.  
Cat. WH-3040 RED  
Cat. WH-3042 GREEN  
Cat. WH-3041 BLACK

**30¢ metre**

**\$25 per 100 metre roll**

## Extra Heavy Duty

24 x 0.2mm  
Suitable for 250V wiring and general heavy duty work. Rated at 7.5 amps.

Cat. WH-3050 BROWN  
Cat. WH-3052 BLUE

**35¢ metre**

**\$26 per 100 metre roll**



## 3mm Auto Cable on 9m Rolls

The economical way to buy auto cable. Seven colours available on handy 9.25 metre rolls. Every car should have a roll in the tool box.

Cat. WH-3080 RED  
Cat. WH-3081 BLACK  
Cat. WH-3082 BROWN  
Cat. WH-3083 YELLOW  
Cat. WH-3084 GREEN  
Cat. WH-3085 BLUE  
Cat. WH-3086 WHITE

**\$3.99 per reel**



## IDC Ribbon Cable

Designed for IDC connectors. Grey in colour.  
Cat. WM-4502 16 way \$1.95 metre  
Cat. WM-4504 25 way \$2.95 metre  
Cat. WM-4506 34 way \$3.95 metre  
Cat. WM-4508 50 way \$5.50 metre



## Rainbow Cable

Colour coded strands of insulated conductor bonded together in a flat cable. Ideal for rewiring looms, can be split and each individual wire used. Same rating as 13 x 0.12mm light duty hook-up wire.

Cat. WH-4510 10 core \$2.50 metre  
Cat. WH-4516 16 core \$3.75 metre  
Cat. WH-4518 24 core \$4.95 metre



## Curly Cord

1.8 metre 3 conductor curly cord for microphone replacements etc.  
Cat. WA-1090

**\$5.50**



## 50 Ohm Light Duty RG58AU

Suited up to 500MHz. Ideal for CB radio, marine, amateur and two-way radio.

Cat. WB-2010

**80¢ metre**

**\$60 per 100 metre roll**



## 4 Core Alarm Cable

4 core, flexible stranded conductors (7 x 0.18) in tough outer sheath.  
Cat. WB-1590

**75¢ metre**

**\$60 per 100 metre roll**



## Microphone Cable

High quality black PVC covered with cotton filler. Size 14 x 0.18mm. Conductor O.D. 4.6mm.  
Cat. WB-1520

**\$1.40 metre**

**\$120 per 100 metre roll**



## Microphone Cable - Twin

High quality twin shielded with tinned braided copper, which makes it ideal for balanced line microphones.  
O.D. 5.2mm  
Cat. WB-1524

**\$2.10 metre**

**\$185 per 100 metre roll**



## Computer Cable

Two new cables suited for computers, etc Both are shielded to stop RFI.

**6 WAY Cat. WB-1575**

**\$1.65 metre**

**\$130 per 100 metre roll**

**9 WAY Cat. WB-1578**

**\$1.90 metre**

**\$160 per 100 metre roll**



## Telephone Type Cable

Similar to what Telecom use for telephone wiring. Single core cable each PVC covered and in an outer cable.

Three types available. Great for intercoms, alarm wiring etc.  
Cat. WB-1602 2 pair (4 wire)

**65¢ metre \$50/100m roll**

Cat. WB-1603 3 pair (6 wire)

**85¢ metre \$65/100m roll**

Cat. WB-1610 10 pair (20 wire)

**\$1.95 metre \$150/100m roll**



## Enamel Copper Wire

	mm	B&S	Wght	
WW-4008	0.125	36	25g	\$3.50
WW-4010	0.2	32	25g	\$3.50
WW-4012	0.25	30	25g	\$3.50
WW-4013	0.3	28	25g	\$3.50
WW-4014	0.4	26	25g	\$3.50
WW-4016	0.5	24	100g	\$4.75
WW-4018	0.63	22	100g	\$4.75
WW-4020	0.8	20	100g	\$4.75
WW-4022	1.0	18	100g	\$4.75
WW-4024	1.25	16	100g	\$4.75

For winding chokes, crossovers coils etc. Supplied on its own plastic reel.



## Tinned Copper Wire

Two handy sizes of 22 swg (0.71mm) for wire links, etc.  
**APPROXIMATELY 6 METRES IN A PACK**

Cat. WW-4032

**\$1.95**

**100 GRAM ROLL**  
Cat. WW-4030

**\$6.50**



## Wire Wrap Wire

Assorted colours and lengths of popular wire for wire wrapping.

	Colour	Pack
Cat. WW-4310	Black	100
Cat. WW-4312	Blue	100
Cat. WW-4314	Green	100
Cat. WW-4316	Red	100

Length 3.5"

**ALL ONE PRICE \$5.95 ea**

Cat. WW-4330 Black 100

Cat. WW-4332 Blue 100

Cat. WW-4334 Green 100

Cat. WW-4336 Red 100

Length 5.5"

**ALL ONE PRICE \$6.95 ea**



## Mini Teflon Pack

Very high quality, small diameter Teflon coated 75 ohm, 1 metre lengths

Cat. WB-2300 \$3.95

**BUY IN BULK AND SAVE**

Due to our bulk buying we can offer bulk packed lengths at special prices.

Cat. WB-2302 4 metres

**\$10.00**

Cat. WB-2304 10 metres

**\$20.00**

Cat. WB-2306 50 metres

**\$75.00**



## Hook-Up Wire Pack

2 metres of 8 different colours of 13 x 0.12mm hook-up wire.

16 metres in all.

Cat. WH-3025 **\$2.25**

## Spaghetti Pack

A bag of assorted sizes of plastic tubing suited for many uses.

Cat. WB-5502 **\$3.50**

## Wire Stripper 'T' Rex

Our wirestripper, nicknamed 'Tyrannosaurus Rex' is far from extinct! It's a great way to strip all sorts of cable without damaging the conductors. It's also a piece of breakthrough.

• Automatically adjusts to insulation diameter

• One hand operation

Cat. TH-1824

**\$12.95**

## Cradle Relays

Cat No	Coil Volts	Coil Ohms	Contact Set	Contact Amps	Contact Power
SY-4016	12	325	DPDT	2A	120VA
SY-4009	12	170	4PDT	1A	60VA
SY-4015	48		6PDT	1A	60VA

Sizes: SY-4016 29 x 17 x 30(H)mm  
SY-4009 29 x 18 x 30(H)mm  
SY-4015 30 x 25 x 32(H)mm

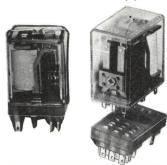
Prices: Cat. No. 1-9 10+

SY-4016 \$ 7.50 \$ 7.00

SY-4009 \$14.50 \$14.00

SY-4015 \$ 2.95 \$ 2.50

TERMINAL ARRANGEMENT (Bottom View)



## Cradle Relay Sockets

Cat. SY-4002  
2 changeover (DPDT)  
\$1.50 10+ \$1.25  
Cat. SY-4004  
4 changeover (4PDT)  
\$2.50 10+ \$2.20



## Thermal/Magnetic 0.5 Amp Circuit Breaker

QUALITY MADE E-T-A GERMAN MAKE  
Single pole plunger type,  
240V AC or 65V DC

Will interrupt when current exceeds 0.5 amp. Has thermal overload (slow current increase) and magnetic overload (fast current increase) for double circuit protection. Has 2 aux contacts (NO & NC) to trigger remote alarms if necessary. Size 60(L) inc. pushbutton x 42 x 6mm  
Cat. SC-2280



**\$4.50 ea**  
10 or more \$4.00 ea

## Horn Relay

Whilst designed for auto horns, this relay is ideal for any high current application i.e. burglar alarms, ignition cutout, transmitters, etc. - as well as for horns! SPST contacts.

Contact Current (max) 20A  
Contact Voltage (nom) 12V  
Nominal Coil Voltage 12V  
Cat. SY-4068

**\$6.75 ea**  
10 or more \$6.50 ea

## "Octal" (Industrial Type)

12 volt coil 10 amp DPDT contacts. OEM quality. Heavy duty relay. Ideal for power supply and control circuit switch. Size: 54(H) x 35 x 35mm  
Cat. SY-4020

**\$15.95 ea**  
10 or more \$15.50 each

## RELAY SOCKET TO SUIT

Screw down type with screw terminals.

Cat. SY-4021

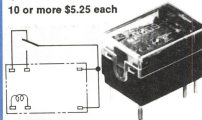
**\$6.95 ea**  
10 or more \$6.50 each



## DIL IC Socket Mount

Extra low profile 11(H) x 16(W) x 11(D)mm  
5V DC bobbin, 1A contact rating, 56 ohm coil resistance. SPDT. 0.5 amp at 120V AC  
Cat. SY-4058

**\$5.50 ea**  
10 or more \$5.25 each



(Bottom views)

## Double Pole Lamp Relay

DPST contacts - each rated at 30 amps! Ideal for Quartz iodine driving lamps or any high current switching application. Contacts can be paralleled for a 12V 60 amp rating.

Contact Current (max) 2 x 30A  
Contact Voltage (nom) 12V  
Nominal Coil Voltage 12V

Cat. SY-4070

**ONLY \$16.95 ea**  
10 or more \$16.00 ea

## Mini PCB Relays

### SPDT Mini

12V DC bobbin, 1 amp (conservative) contact rating. Fully sealed unit measuring: 23(H) x 20(W) x 15(D)mm

Cat. SY-4060

**\$2.95 ea**  
10 or more \$2.75 ea

### DPDT Mini

12V DC bobbin, 1 amp contact rating.

Size: 21 x 16 x 17(H)mm

Cat. SY-4061

**\$4.75 ea**  
10 or more \$4.50 ea

### Mini PCB Relay - Heavy Duty SPDT

12V DC bobbin, 3 amp contact rating

Size: 21 x 16 x 17(H)mm

Cat. SY-4066

**\$3.75 ea**  
10 or more \$3.50 ea



## Specialised PC Mount

Elegant relays. PCB mounting featuring silver alloy contacts

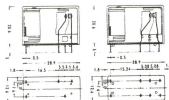
SPDT 12V DC. Coil 285 ohms, 10A @ 30V DC or 10A @ 240V AC contact rating.

Cat. SY-4050

**\$7.95 ea**  
10 up \$7.20 ea

DPDT 12V DC. Coil 285 ohms, 2 x 5A @ 30V DC or 2 x 5A @ 240V AC contact rating  
Size: 29 x 12 x 26(H)mm  
Cat. SY-4052

**\$9.95 ea**  
10 up \$9.20 ea



## Power Relay

Where really heavy currents need to be switched for large mains appliances, high power speakers Rated at 10A 240V AC. Coil 12V 160 ohms. DPDT contacts. Size: 27 x 20 x 35(H)mm  
Cat. SY-4065

**\$12.50 ea**  
10 or more \$12.00 ea



**SYDNEY-CITY 267 1614**

Relays

## High Grade Stereo Mixers at Direct Import Prices

**ATTENTION - Social Clubs, Schools, Churches, Disco Operators, Entertainers, Hotels, Night Clubs and Sporting Bodies.**  
**With Jaycar's low prices - here is your opportunity to install one of these outstanding sound control mixers.**

### Stereo Audio Mixer

This brilliant little mixing console is absolutely packed with features. It allows blending of microphone, two phono inputs and either two tape or tuner inputs.

#### FEATURES:

- Right and left VU meters
- Separate bass and treble controls
- 5 slide level controls
- Headphone monitor switch
- Talkover facility
- 240V mains operated

#### SPECIFICATIONS:

Input	Mic 0.5mV 600 ohms Phono 3mV 50k ohms Tape/tuner 150mV 100k ohms 250mV
Output	20Hz - 20kHz ( $\pm 1$ dB)
Frequency	Treble 10kHz ( $\pm 12$ dB)
Tone Control	Bass 100Hz ( $\pm 12$ dB)
Distortion	Less than 0.07%
S/N Ratio	More than 60dB
H/P Impedance	4 - 16 ohms
Dimensions	318(L) x 217(W) x 85(H)mm
Cat. AM-4200	

new for

\$169



### 4 Channel Microphone Mixer

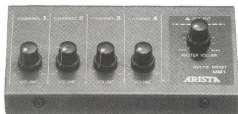
Its size and simplicity make this mixer very portable and easy to operate. It will accept up to 4 low impedance microphones. With power on LED.

#### SPECIFICATIONS

Inputs	4 low impedance 600 ohm microphone individual gain control for each microphone master volume control Inputs/outputs - 6.35mm mono sockets
Connectors	9V DC (battery only)
Power Source	1.5k ohm
Output Impedance	55dB
S/N Ratio	20Hz - 10kHz $\pm 2$ dB
Freq. Response	90mV (at input 5mV)
Output Level	Dimensions
Dimensions	148 x 46 x 86mm
Cat. AM-4204	

new for

\$49.50



### Stereo Mixer with Equaliser

A very professional unit at an affordable price.

#### FEATURES:

- 6 inputs of which 4 are for microphone or line and 2 for phono incorporating 4 x RCA and 2 x 6.5mm sockets
- Headphone socket with volume control
- Output level VU meters or LED display
- Mic input volume control
- Master volume control
- Fader and cue control
- 5 band equaliser
- 240V operated

new for

#### SPECIFICATIONS:

Sensitivity	Phono 3mV Mic 1mV Line (tape or tuner) 150mV
S/N ratio	Phono 55dB Mic 60dB Line 65dB
Frequency	Phono 20Hz - 20kHz (RIAA $\pm 2$ dB) Mic 20Hz - 20kHz $\pm 3$ dB Line 20Hz - 20kHz $\pm 3$ dB
Channel Bal	0.5dB
T.H.D.	Less than 0.03%
H/P Impedance	4 - 16 ohms
Output	0.775V
Equaliser	Centre frequency 60, 250, 1k, 4k, 12k Control Gain $\pm 12$ dB
Dimensions	15.8"(W) x 10.5"(D) x 3.4"(H)
Cat. AM-4202	

\$299



### TURN YOUR SURPLUS STOCK INTO CASH!!

Jaycar will purchase your surplus stocks of components and equipment. We are continually on the lookout for sources of prime quality merchandise.

**CALL GARY JOHNSTON OR  
 BRUCE ROUTLEY NOW ON  
 (02) 747 2022**

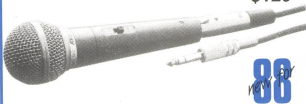


## Unidirectional Balanced Top of the Range "A.K.G." Insert

A top quality microphone finished in matt grey. Features the famous "A.K.G." insert fitted into a rubber mounting anti-shock holder. Has on/off switch, Cannon connector and comes with holder.

Type Unidirectional, balanced line  
Impedance 600 ohms (no transformer)  
Freq. Response 70Hz - 15kHz  
Sensitivity -77dB  
Cord/Plug 5 metre cord/Cannon to 6.35mm plug  
Cat. AM-4060

**\$125**



## Unidirectional Balanced Line Dual Impedance

The best all round microphone we could find. Balanced low and high impedance. Fitted with a "Primo" rubber mounted insert. Finished in matt grey, with on/off switch and Cannon connector

Type Unidirectional - dual impedance - balanced line  
Impedance 600 and 20k ohm  
Freq. Response 50Hz - 17kHz  
Sensitivity Lo -76dB, Hi -58dB  
Cord/Plug 5 metre cable/Cannon to 6.35mm stereo plug  
Cat. AM-4065

**\$109.50**



## Unidirectional Balanced Line

A heavy grey metal body microphone, mesh grill fitted with a "POP" filter and on/off switch. Supplied with Cannon connector and mic holder.

Type Unidirectional - balanced line  
Impedance 600 ohm  
Freq. Response 50Hz - 15kHz  
Sensitivity -76dB  
Cord/Plug 5 metre cable/Cannon to 6.35mm plug  
Cat. AM-4062

**\$67.50**



## Dual Impedance Unidirectional Dynamic

A quality microphone made from zinc diecast metal with non reflective matt grey finish. Fitted with anti "POP" filter and on/off switch. Complete with cord and microphone clip.

Type Unidirectional - dual impedance  
Impedance 600/50k ohm  
Freq. Response 50Hz - 14kHz  
Sensitivity Lo -78dB, Hi -58dB  
Cord/Plug 6 metre cable/4 pin to phone plug  
Cat. AM-4092

**\$44.95**



## Low Cost High Quality Unidirectional

An excellent value for money microphone. Silver in colour, plastic body with black metal grill incorporating anti "POP" filter. Supplied with on/off switch and desk stand.

Type Unidirectional - low impedance  
Impedance 600 ohm  
Freq. Response 100Hz - 15kHz  
Sensitivity -74dB  
Cord/Plug 3 metre cable/6.35mm plug  
Cat. AM-4090

**\$19.95**



## Electret Unidirectional

A very popular slimline microphone. Anodised champagne aluminium body, mesh grill with built-in windscreen. Includes mic holder and battery.

Type Unidirectional - low impedance - electret  
Impedance 600 ohm  
Freq. Response 20Hz - 20kHz  
Sensitivity -72dB  
Cord/Plug 3 metre/6.35mm plug  
Battery 1.5V AA type  
Cat. AM-4080

**\$29.95**



**CARLINGFORD 872 4444**

## Wireless Microphone

Very easy to use microphone. Finished in matt grey with black mesh grill. Runs on 9V battery for long life.

Type Omnidirectional - electret  
Tuneable 92MHz - 104MHz  
Freq. Response 50Hz - 15kHz  
Range Over 100 metres in open field  
Power Source 9V (216) battery  
Cat. AM-4072

**\$17.95**

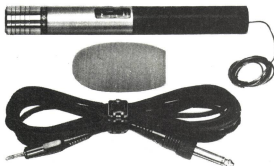


## Wireless/Wired Electret

Best of both worlds can be used as a conventional wired microphone or as a tuneable wireless microphone. Complete with on/off switch, foam windshield and mic holder.

Type Omnidirectional - low impedance - wireless/wired  
Tuneable 88MHz - 108MHz  
Freq. Response 50Hz - 16kHz  
Field Strength 15uV/100m  
Impedance 600 ohm  
Battery 1.5V AA  
Cat. AM-4070

**\$37.50**



## Wireless Microphone and Receiver

Crystal locked FM wireless microphone and receiver at an affordable price. Electret insert in microphone and high-low switch assures adequate sensitivity and output to receiver. Receiver features on/off switch with output volume control and LED power on indicator, also has an AC adaptor inlet socket.

Type Unidirectional - crystal locked wireless system  
Transmitting Freq. 37.1MHz  
Microphone Electret condenser  
Power Supply 9V (216) battery  
Range 300 feet in open field  
Receiving Freq. 37.1MHz  
Power Supply 9V battery or 9V power adaptor  
Output 30mV via 3.5mm plug  
Cat. AM-4075

**\$99.95**



## Crystal Locked Wireless Microphone System

Adds a new dimension to video movie capabilities by allowing the miniature wireless microphone to be attached inconspicuously on the subject. The receiver attaches to the video camera, no longer will noise between camera and subject cause annoying interference.

### SPECIFICATIONS - TRANSMITTER

Power Supply 3 x UM3/AA 1.5V batteries  
Battery Life Approx 30 hours  
Standard 37.6MHz  
Transmitting System Crystal oscillation  
Microphone Element Electret  
RF Power 200 feet (open field)  
Frequency Stability 0.005%  
Frequency Range 70Hz - 12kHz

### SPECIFICATIONS - RECEIVER

Power Supply 9V battery or 9V DC power adaptor  
Battery Life Approx 5 hours  
Standard 37.6MHz  
Receiving System Crystal oscillation  
Intermediate Frequency 10.7MHz  
S/N Ratio Over 85dB  
Image & Spurious Rejection at least -75dB  
Cat. AM-4076

**\$139.50**



## Unidirectional Wireless Tie Clasp Microphone

This incredibly small microphone just clips on your tie or collar and transmits on FM. No more messy wires to trip over!

- Tunable 88MHz - 108MHz FM
- Frequency Response 100Hz - 10kHz
- Electret condenser type

Cat. AM-4068

**\$36.50**

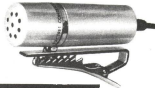


## Quality Tie Clasp Microphone

Low impedance, omni-directional electret condenser. A very small microphone which clips on to your tie. Supplied with 3 metres of cable to a 3.5mm plug, 1k ohm impedance.

Frequency response 40 - 16kHz.  
Cat. AM-4067

**\$29.95**

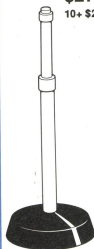


## Microphone Desk Stand

Quality toughened metal stand with adjustable height for any size desk.  
Cat. AM-4120

**\$27.50**

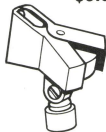
10+ \$26.00 ea



## Microphone Holder

Unique new universal holder. It has a powerful spring loaded clamp which will fit almost all microphones. Standard 5/8" x 27 thread.  
Cat. AM-4100

**\$5.50**



## Flexible Gooseneck

Standard metal gooseneck, 5/8" male to 5/8" female.  
15cm long.  
Cat. AM-4115

**\$5.50**

SAME AS ABOVE BUT 33cm LONG  
Cat. AM-4125

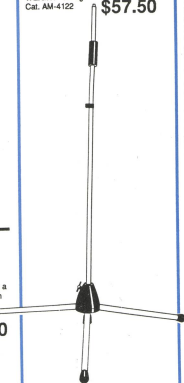
**\$9.95**



## Telescopic Floor Stand

Quality, stable floor stand. Single draw telescopic stem fitted with friction grip and dual screw adaptor, 3/8" and 5/8" for microphone holder.  
HEIGHT 96cm to 154cm  
WEIGHT 3.4 kg  
Cat. AM-4122

**\$57.50**



## Microphone Wind Shield

All four models are black and suit most microphones.

Made of sponge rubber.

Cat. AM-4131	20 - 22mm
Cat. AM-4132	23 - 25mm
Cat. AM-4133	33 - 36mm
Cat. AM-4134	36 - 42mm



## Weather Proof Hi Fi Extension Speakers

New for 1988  
New for our 1988 product line up, Jaycar has available two models of the superb Redford outdoor speakers. Redford speakers feature: rugged extruded aluminium construction, superb powdercoat industrial paint finish, excellent reproduction, engineered in Australia, superior to imports - yet a fraction of the cost.

Rugged Extruded Construction  
These vibration free enclosures are constructed from die extruded heavy gauge aluminium and finished with incredibly durable industrial powder-coated black enamel. The speaker ends are sealed via gaskets and tough moulded "LURAN" UV resistant and caps. The end result is "Good Looks" together with assured rugged durability for the Australian environment.

Excellent Reproduction  
The drivers have been chosen for wide range, low distortion, mid range "presence" (essential for high grade vocal work) and high efficiency in general. Power Capacity for short term use, the drivers will safely handle 150% of rated power. Acoustic wadding is used to dampen bass resonance. Weather Proof Construction and use of "Doped Cones" Foam plastic and cloth is sandwiched between baffle and front grille to prevent water ingress. A first for Redford is the use of a patented moisture repellent process for all models.

### 10 WATT

Single dual doped cone driver 16 ohm impedance is employed to give a generally correct volume balance with main speakers - an added bonus is your amplifier load is kept to respectable limits! Great for back patio, den, boat deck, etc.  
Size: 275(H) x 187(W) x 135(D)mm  
Cat. AS-3040

**\$109 each**

### 20 WATT

Uses 2 special dual doped cone driver for those wanting a bit more umph! - 8 ohms.  
Size: 455(H) x 167(W) x 135(D)mm  
Cat. AS-3042

**\$149 each**

## 8" PA Speaker Box

Quality woodgrain finish speaker box. Designed to hang on a wall for PA use, or just as an inexpensive speaker for Hi Fi, radio, etc.

SPEAKERS TO SUIT:  
8" 10 watt twincone Cat. CE-2325

**\$13.95**

Magnavox 8JX 40 watts Cat. CE-2333

**\$28.50**

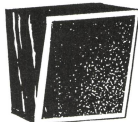
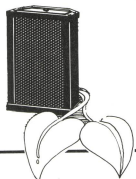
Magnavox 8WR 65 watts Cat. CE-2338

**\$34.50**

Speaker Box Cat. CB-2360

**\$26.50**

10 up \$24.50 each



Microphones

**GORE HILL 439 4799**

## Mic Insert

Great replacement electret mic inserts for tape recorders, etc. Handy for hobby projects. Includes data sheet and applications circuit. Operates from a single 1.5V battery. 10mm diameter. 50Hz - 15kHz. Cat. AM-4010

**\$1.95**

10 or more \$1.65 each



## Unidirectional Electret Insert

A direct import unit that is ideal for the EA Parabolic Microphone project in November 1983 EA. Average sensitivity around 7dB BETTER than the common low cost electret insert. The insert has a front-to-back ratio of 1.5:1. The power requirements are the same as for the low cost mic insert. Each insert is supplied with a comprehensive data sheet which includes connection details, specifications and frequency response graph.

Cat. AM-4012

**\$5.50**

10 or more \$5.00 each



## Ultrasonic Transducers

These units operate at 20kHz, are of high sensitivity and directional design. They are suitable for Burglar Alarms, Movement Detectors and Interrupted Beams. They are sold as a transmit and receive pair. Cat. AU-3850

**\$17.95** pair



## Resonant Microphone

This device is capable of picking up vibrations, thumps and bangs, etc. These are used successfully in the sophisticated ETI 340 Car Alarm.

Cat. AM-4000

**\$8.50**

## E180 VHS Video Tapes

MAXELL E180 Cat. AR-1450

**\$12.95** ea

10+ \$12.50 ea

TDK E180 Cat. AR-1440

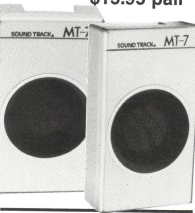
**\$14.95** ea

## Walkman Speakers

Pair of micro mini stereo speakers. Ideal for Walkman type radios, players.

Cat. AA-2050

**\$15.95** pair



## 240 Volt Head Demagnetiser

With this powerful mains operated demagnetiser you can remove built-up magnetism in your cassette heads and guides in just a few seconds. Don't put up with noisy reproduction - keep your cassette machine in tip top condition.

Cat. AC-1600

**\$14.95**



## Headshell

If you own two cartridges you need two headshells. Quality brand, standard 1/2" fitting. Complete with mounting screws.

Cat. AA-0200

**\$3.95**



## TDK Audio Tapes

Cat. AR-1410	D60	Pack of 3 \$ 8.95
Cat. AR-1412	D90	Pack of 3 \$11.95
Cat. AR-1416	AD60	Pack of 2 \$ 7.95
Cat. AR-1420	AD90	Pack of 2 \$10.50
Cat. AR-1425	SA90	Pack of 2 \$13.95



## Crystal Earpiece

Crystal earpiece of high impedance with 3.5mm plug.

Suitable for crystal sets or for experimental use.

Cat. AS-3305

**\$3.75**

10 or more \$3.60 each



## Magnetic Earpiece

Magnetic 8 ohm earpiece with 3.5mm plug connected. Suitable for radios, portable TVs etc. Lightweight and easy to use.

Cat. AS-3300

**\$1.25** ea

10 or more \$1.10 each

AS ABOVE

Fitted with 2.5mm plug

Cat. AS-3301

**\$1.25** ea

10 or more \$1.10 each



## Dynamic Earphone

High quality earphone with ear hanger. Ideal for TVs.

Frequency Response

Impedance

Sensitivity

Cord

Cat. AS-3303

**\$6.99**

20Hz - 18kHz

8 - 50 ohms

98dBmW

4.5m with 3.5mm plug



## Erasa Video Labels

Got a video? Do you have hassles with trying to remove sticky title labels from cardboard video boxes? Erasas Labels consist of a full length label which you stick on once, and a special pen. When you record over a tape, simply rub the label with a damp cloth and reuse.

**12 VIDEO LABELS AND A PEN**

**\$4.99**

new for 88





## Digital Stereo Headphones

We have introduced a range of high quality attractively boxed stereo headphones specifically designed to handle the dynamic range of CD players.

### SA700

These phones feature 32 ohm Mylar drivers and low fatigue headband assembly. A 10 foot cord is provided with a quality METAL 3.5mm stereo plug. The headband has a separately adjustable strap to get a good 'fit'. Many otherwise good headphones have a poor head fit. Sponge rubber earpads.

Cat. AA-2021

**\$29.50**

### SA800

The big feature of these 'phones is the obvious quality. The main headband is stainless steel with a sub-band that is adjustable to a considerable degree. The muff pads are beautifully made from the softest leather-like material we have ever seen. It is sewn up as a foam filled ring - and it might even be leather! It gives an extremely comfortable fit to your ear and effectively seals out external noise. A generous 10 foot heavy duty cord is provided terminating in a quality METAL 6.5mm stereo plug

Cat. AA-2022

**\$39.50**

### SA888

Similar to model SA800, except with larger Mylar drivers and further development of the earpad assembly. Simply the finest 'phones we have tested in a long, long time. They compare very favourably with pricey German 'phones.

Cat. AA-2023

**\$59.50**

#### SPECIFICATIONS

Speakers	High velocity Mylar diaphragm driver
Impedance	32 ohms
Output SPL	102dB (1mW)
Freq. Response	20Hz - 20kHz
Rated Input	100mW
Cord	10ft with 6.5mm stereo plug



## Sennheiser Muffs

Genuine factory made spare foam earpads for the famous Sennheiser HD-414 'phones.

Cat. AA-2011

**\$11.95**

per pair

## Mini Muffs

Foam earpad replacements for mini headphones. 27mm diameter - 2 pairs.

Cat. AA-2012

**\$3.75**

## Ultra Light Walkman Phones

Quality phones at a realistic price.

Cat. AA-2016

**\$8.95**



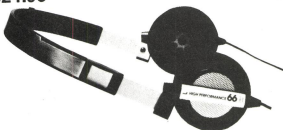
## Ultra Light Top Quality Phones

You'll be amazed at the superb sound from these.

Test drive a pair today!

Cat. AA-2019

**\$24.95**



## Pro II Headphone/Microphone

A comfortable set of large aorath style headphones with Hi Fi performance and a 600 ohm omni-directional boom microphone. The uses are endless.

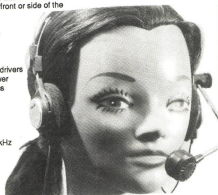
The mic is mounted in a superb gymbal mount which adjusts so that the mic is positioned close to the front or side of the wearer's mouth.

- CB'ers
- Amateur radio mobile
- Rock groups

#### SPECIFICATIONS

Headphone:  
40mm diameter Mylar drivers  
400mW max input power  
Impedance 28-32 ohms  
Cord length 6 foot

Microphone:  
Type dynamic  
Omni-directional  
Impedance 600 ohm  
Sensitivity -84dB @ 1kHz  
Cord length 7 foot  
Cat. AA-2020



**\$39.95**

## Inner Ear Mini Stereo Phones

Unique type headphones, so small they can be stored in a MATCHBOX. Very high sound quality and comfortable to use. Supplied with adaptor plug to 6.5mm and spare replacement ear pads.

Cat. AA-2014

**\$8.95**



**SYDNEY-CITY 267 1614**

## Keyless 4 Sector Alarm Panel

new for

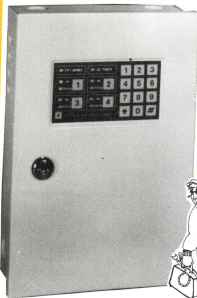
The latest addition to our range of alarm equipment. The LA-5170 is a reliable and versatile panel designed for residential and commercial systems. It employs the latest electronic circuitry and the most up-to-date security technology. It has 4 independent and isolated protection circuits which accept both normally open (N.O.) and (N.C.) normally closed switches and are sealed with end of line resistors. Two independent siren drivers with tamper proof, two output relays, two auxiliary output supplies for peripheral accessories and the facility for multi-remote station connections are also employed.

### FEATURES AND SPECIFICATIONS

- **SECTOR 1** 24 hour instant emergency circuit protects siren covers and outside buildings continuously even when alarm is off
  - **SECTOR 2** Perimeter instant circuit
  - **SECTOR 3** Interior instant circuit
  - **SECTOR 4** Interior delay circuit
  - All sectors sealed with 10k end-of-line resistor for total security. This means that if a wire is cut the alarm will go off
  - All sectors can be isolated independently
  - All sectors accept both N.C. and N.O. switches
  - 5040 combination alarm/arming code, easily changed
  - Exit delay - 60 seconds typical
  - Entry delay - 2-90 seconds adjustable, with selectable "bEEP"
  - Siren duration 0.5 - 10 minutes adjustable
  - More than one remote on/off keyswitches/keypads can be connected and connecting wires are tamperproof.
  - 12 volt DC outputs for running accessories/sensors, one switched and one continuous
  - Alarm outputs
    - latching relay with 3 amp N.O. dry contact
    - Timing relay with 3 amp N.O. dry contact
  - 2 independent driven outputs for 8 ohm horn speakers, tamperproof.
  - Panic button on alarm panel
  - Dimensions 258(H) x 172(W) x 74(D)mm
  - Net weight 1.5kg
  - Gel Battery to suit 1.2 amp Cat. SB-2480 \$22.50
  - Power supply to suit 16V AC Cat. MP-3021 \$29.50
- We believe this is one of the best alarm panels we have evaluated. We have seen numerous other panels with less features that cost more.

Cat. LA-5170

**\$259**



## Keyless Alarm Control Panel

### FEATURES AND SPECIFICATIONS

- Five Protection Circuits
  - Emergency one 24 hour NO instant circuit
  - Burglary one NO instant circuit
  - one 24 hour NO circuit
  - one NC delay circuit
  - one NO delay circuit

Intelligent Siren driver changes Alarm Tone for different events

- Drives 2 x 8 ohm horn speakers maximum
- Adjustable entry delay and siren duration timer
  - Entry delay 1 - 30 seconds
  - Siren duration 0.5 - 10 minutes with auto reset
- 60 second exit delay - for all protection circuits
- Separate siren drivers for burglary and emergency circuits

Two Independent NO relay output contacts

- Timing relay contact with auto reset time according to siren duration
- Latching relay contact with contact stays close after alarm condition

Auxiliary 12V/500mA DC output

- Continuous and controlled on/off by key switch available
- For powering accessories, such as motion detectors, smoke detector, photoelectrics, etc

Adjustable alarm status indication

- Exit delay period - short "BEEP" at half second interval (selectable for silent exit)
- Entry delay period - 2 second "BEEP" at quarter second interval (selectable for silent entry)
- Alarm testing - 2 second "BEEP" at quarter second interval
- Tampering - 2 second "BEEP" at quarter second interval
- Low battery - short "BEEP" at 8 second interval
- 6 LED lamps on panel indicating alarm status
- 24 hour panic button mounted on panel
- More panic buttons can be mounted at remote locations

Alarm on/off by digital access key

- One remote key can be mounted on other location (digital keypad or electromechanical key switch are possible)

Complete tamper proof system

- Tamper proof for remote key
- Tamper
- Tamper proof for siren horns
- Tamper proof plus locking cam lock for cabinet
- Built-in test switch for convenient testing
- Disables the siren driver and output relays and enables the internal buzzer in testing to prevent noise pollution

Built-in main power on/off switch for easy service

- Switches on and off the whole system
- Built-in charging circuit selectable
- Allows use of rechargeable battery or dry cells as back-up power

Cat. LA-5168

Back-up battery

**\$209.00**

Cat. SB-2480 \$22.50

Power supply to suit 16V AC Cat. MP-3021 \$29.50



## Alarm Control Panel

This low cost, but professionally made steel encased alarm has most of the main features of professional control boxes including:

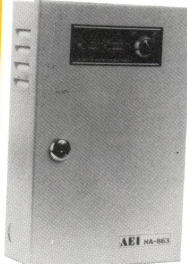
- Lockable baked enamel steel box including tamper switch
- 3 sectors NO or NC
- Trigger instantaneously if any sensor wiring cut
- Space in box for back-up battery
- 24 hour instant circuit that is not governed by keyswitch, for smoke detector, etc.
- Facility to connect remote keyswitch (Alarm will latch if remote wiring is cut, whether alarm is "off" or "on")
- Built-in siren driver
- Relay output control provides 12V DC for bells, sirens, etc.
- Diagnostic audible and visual alarm status indicators
- Simple one key operation. Ideal for non-technical people to operate once installed.
- Dimensions 230(H) x 170(W) x 70(D)mm
- Net weight 1.6 kg
- Cat. LA-5162

**\$149.00**

Gel battery to suit

Cat. SB-2480 \$22.50

Power supply to suit 16V AC Cat. MP-3021 \$29.50



When wiring your alarm, why not use a screamer or two for inside.

## 116dB of 'Tweetie Pie'

This incredible little piezo screamer (measuring 57(L) x 39(H) - less bracket) emits a 116dB wail. It sounds like a very loud canary. The sound at close range is almost unbearable. If you mount it inside your car and your alarms fire, a would be thief would probably be scared out of his wits! Ideal for any compact high noise alarm application.

Cat. LA-5255

**VIRTUALLY  
UNBEARABLE  
ONLY \$17.95**

10+ \$16.95



## Passive Infra Red Detector with Pulse Count Triggering

The absolute latest technology is used in this PIR. It employs a pulse count triggering circuit which virtually eliminates false alarms.

Here's how it works. The circuit first senses an alarm (pulse 1) and then goes into alarm standby mode for 30 seconds duration. If during the 30 second standby mode a second alarm event occurs (pulse 2), the detector goes immediately into alarm, and the standby period will be extended for another 30 seconds. If there is no second alarm pulse during the 30 second standby mode the detector returns to normal condition. The LA-5019 also has dual element pyroelectric sensor incorporating "daylight" filter designed to provide immunity from common mode signals such as the effect of strong hot or cold air currents, variation in ambient temperature, background radiation and acoustic noise.

### FEATURES

- Dual element pyroelectric sensor
- Pulse count triggering circuitry
- Fresnel lens array large coverage
- 24 dual element detection zones
- For long, mid and short range protection
- Surface or corner mounting without extra accessories.

### SPECIFICATIONS

Detection Pattern	84.2° angle span, 12 metre range
Detection Zones	24 dual element zones in 3 layers
LED Indicators	One pattern locator, one alarm walk test indicator
Mounting Height	2 metres above floor, 13.96° angle of tilt on back plate
Mounting Location	Indoor only. Flat surface or corner mount
Operating Voltage	10.5 - 18V DC
Quiescent Current Sensor	15mA typical
Triggering Mode	Dual element pyroelectric sensor with daylight filter Pulse count or single shot selectable
Alarm Output	NO (fail safe) contacts, 0.5A/24V rating
Alarm Period	2 seconds typical
Tamper Contact	NC when depressed, 0.5A/24V rating
Testing Output	Test point analysing
Dimensions	115 x 74 x 73mm
Weight	160 gram

Cat. LA-5019

**\$139**

## Economy PIR With Pulse Count

This PIR works in the same manner as the LA-5019 (w/PI).

### FEATURES

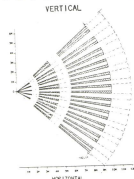
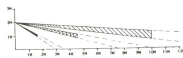
- Dual element pyroelectric sensor
- Pulse count triggering circuitry
- Fresnel lens array
- Beam masking for potential false alarm sources
- Wide angle multi-layer coverage

### SPECIFICATIONS

- 30 dual sensor elements
- 110° wide angle horizontal span
- Up to 12° vertical adjustment
- 12 metre range
- Operating voltage 6 - 18V DC
- Operating current 20mA
- Relay output N.C. rating 0.5A 24V DC
- Tamper protected
- LED indicator (selectable)
- Size 70(H) x 84(W) x 46(D)mm

Cat. LA-5018

**\$119**



## Infra Red Movement Detector

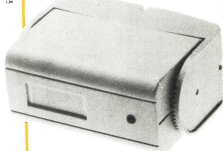
The infra red or IR detector for short, falls into the Black Magic category. It basically is a high gain passive tuned receiver of a particular IR band. The heart of the unit consists of a high gain lens (antenna?) which has a "Commutated" field of view. Its reception pattern is comb like, but, highly tuned to the IR wavelength of human bodies. When a human passes within proximity of the pickup area, the lens will selectively pick up IR radiation and then not. Movement across the pickup area will result in a series of pulses sent to a detector circuit. IR detectors are very reliable as they do not transmit and will not respond to non heat radiating objects, curtains, for example, can wave about without triggering the alarm. Even the cat is unlikely to trip the unit.

### FEATURES

- 12V DC powered
- Double sensor
- Computerised OC to lower failure rate
- Built-in test lamp
- Alarm output SPST 30V DC @ 1A

Cat. LA-5017

**\$99**



## Digital Access Keypad

This keypad is designed to be mounted near your exit entry point allowing your panel to be safely hidden elsewhere. The LA-5160 digital access keypad is a 12 button electronic coded combination lock. It provides two sets of secret codes, there are 11,860 different combinations possible for security key and 132 for panic. The keypad is mounted on a brushed stainless steel mounting plate which is designed to fit into a single electrical gang box, for flush mounting. It incorporates a normally closed tamper switch, and is suited for most kinds of security systems and electronic door strike applications. It is a simple system which is easy to use (even for kids) but virtually impossible to beat. Ideal for use with our new alarm panel LA-5162. Wiring details supplied with alarm panel. Cat. LA-5160

**\$99.50**



**SPRINGVALE-VIC 03 547 1022**

## Night Security Sensor

This brilliant new product uses a built-in passive infra red (PIR) detector that reacts instantly to body heat, and activates a light when a person approaches your home. The light is automatically turned off when the person leaves. The sensor will switch up to 600 watts and when set will only operate at night. After triggered, the lights can be adjusted to remain on anywhere between 5 seconds and 10 minutes.

### Features:

- Compact design
- Fully automatic
- Security - keeps intruders away
- Safety - no more groping in the dark
- Convenient - hands free operation
- Compatible with incandescent, fluorescent, quartz and halogen lighting
- Indoor/outdoor applications
- Suitable for entrances, porches, patios, stairways, garages, basements, hallways, closets, attics, storerooms, warehouses, workshops, etc.
- Can be operated in daylight or darkness

### Specifications:

- Detection coverage - 12 mt long x 110" wide (fan shape)
- Detection zone - 38 beams
- Mounting height - 1.8 - 2 metres
- Power consumption - 3 watts maximum
- Lighting load - 600 watts max.
- Water resistant
- 240V AC operated

**DON'T PAY \$199**  
use existing lights

Cat. LA-5130

**\$115**



## Autolite Car Theft Deterrent With Ignition Killer

One better than the "claytons" type flasher deterrent. Not only does this unit have a bright flashing bezel, it incorporates an ignition killer. Turns on automatically when ignition is turned off.

Don't let your vehicle become a statistic.

- Stops engine from being hot wired
- Push button reset for starter cut out
- Automatically turns on/off with ignition
- Bright dashboard visual deterrent
- No false alarms
- Full wiring instructions supplied

Cat. LA-5055

**\$39.95**

## Infra Red Photo Electric Relay

This is the device which makes all the noise when you walk into a shop. Mounts on one side of the door, and the reflector (which is supplied) on the other. It will sound when someone breaks the beam, or can be switched so it sounds for 5 seconds and then resets. 240 volt operating. Will operate up to 15 metres. Built-in buzzer (extension buzzer can be added).

Size 90 x 143 x 190mm

Cat. LA-5120

**\$129.00**

new for 88



## Car Theft Deterrent

Save your car for less than \$20

It's a black box with 12 digits on the top (like a calculator) and a flashing LED. It looks very similar to the controller on a very expensive car alarm (the one that guarantees your car won't be stolen).

So with this sitting on your dash, would be thieves will think you have a high quality alarm, and move on. Can be used on its own, or to complement any existing alarm system. Use on cars, around the home, on boats, etc.

Easy to install, size 70 x 50mm, sticky tape already supplied on back. Includes alarm stickers. Requires 2 x AAA batteries (not supplied). Cat. SB-2375 \$1.95 for 2. Cat. LA-5090

**\$19.95**



## Flashing Car Light

For those who couldn't be bothered with making up one of our Claytons burglar alarms.

Pre-built, just connect black wire to negative, red wire to positive and yellow wire to accessory terminal on the fuse box and it works automatically when you turn the ignition switch off. You don't even have to remember to switch it on.

Supplied with huge round red bezel. Lens measures 18mm diameter. Complete with 2 alarm decals

Cat. LA-5080

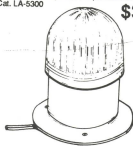
**\$17.95**

## Alarm Strobe Flash

Wire this in your house alarm to strobe when the alarm triggers. Gives visual warning as well as your usual available one. Operates on 12V DC drawing only 150mA. Blue in colour with screw mounting base. Flash rate about 120 per minute.

Cat. LA-5300

**\$39.95**



## Alarm Sticker

Durable self-adhesive sticker that clearly tells would-be-thief that there is an alarm fitted. Sticker does not refer to a specific alarm which creates further doubt.

Cat. LA-5100

SIZE 72 x 32mm

**95¢ each**



**WARNING**

**ELECTRONIC ALARM FITTED**

## Large Alarm Sticker

For trucks, caravans, houses, offices and factories. Where a larger and more prominent deterrent sticker is required.

SIZE 6" x 3"

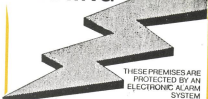
Cat. LA-5102

**\$1.95 each**



**WARNING**

THESE PREMISES ARE PROTECTED BY AN ELECTRONIC ALARM SYSTEM



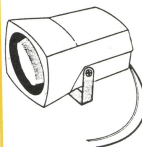


## 116dB of 'Tweetie Pie'

This incredible little piezo screamer (measuring 57(L) x 33(H) - less bracket) emits a 116dB wall. It sounds like a very loud canary. The sound at close range is almost unbearable! If you mount it inside your car and your alarms fire, a would be thief would probably be scared out of his wits! Ideal for any compact high noise alarm application.

Cat. LA-5255

**VIRTUALLY  
UNBEARABLE  
ONLY \$17.95**  
10+ \$16.95



## Two Tone Piezo Siren

High efficiency two tone pulsating siren. Ideal for commercial/industrial use.  
100dB SPL at 12V 200mA.  
Cat. LA-5256

**\$18.95** 10+ \$18.50



## Piezo Buzzer

Similar to Sonalert. Earpiercing sound. Non inductive, operates from 5-15V DC. Ideal for almost all audio signaling applications.

Cat. AB-3456

**\$7.95** 10 or more \$7.65 each

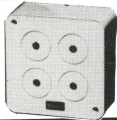


## Indoor Wall Mount Piezo

This high energy piezo siren gives a 102dB SPL, two toned warbled sound. Ideal for alarms in homes and offices as it looks unobtrusive.  
DC 6-15V @ 190mA. Size 105 x 105 x 45mm.

Cat. LA-5260

**\$22.50**



## Alarm Bell

If you want something different for your alarm than a siren try a bell. These operate from 12V DC and are 100mm (4") dia.

Cat. LA-5270

**\$14.95**



## 5 Watt 8 Ohm Plastic Flare

Fully weatherproof. New unique voice coil construction ensures high dependability on full drive. Suitable for PA, intercom, security systems, etc.

Cat. AS-3180

**\$13.95** 10+ \$12.95 ea



## Weatherproof Siren Horn

12V DC operated deafening siren wail. Super handy for audio signaling, security systems, etc. Current drain 500mA. Completely weatherproof. Attractive off white PVC finish.

Cat. LA-5700

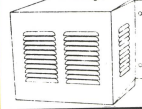
**\$26.50**



## External Siren Cover

Louvered painted steel. Size for 5" horns or sirens. Special tamper switch on bracket. (Included).

Cat. LA-5110



**\$23.50**

## Weatherproof Re-Entrant Horn

15 WATT 8 OHM - 5" x 8"  
Fully weatherproof. Rectangular plastic flare PA speaker.

**NOTE RUBBER  
RESONANCE DAMPER!!**

Cat. AS-3182



**\$42.95**

## Mini Buzzer

This handy little solid state buzzer operates between 5-15VDC. Used in many, many kits.

Cat. AB-3452

**\$2.75**

10 or more \$2.50 each



## Audio Transducer

This is an electro-acoustic transducer which contains no electronics and will transform AC voltages to sound pressure waves. It will also generate an AC voltage across its terminals when stimulated with a sound pressure wave.

Cat. AB-3440

**\$2.75** 10 or more \$2.50 each



## Vehicle Back-Up Beeper

Gebuine Mallory 'Sonalert'. This device mounts near the rear of any 12V vehicle. When +12V is connected (i.e. from reverse gear switch) it will give the familiar 'beep-beep' note. Simple panel mount fixing. (Operates 4-28V). 69dB min - 80dB max.

Cat. AB-3442



**\$9.95**

## AC Adaptor Power Supply

(Energy Authority Approved)  
The ideal unit to run a burglar alarm. Simply plugs into the wall. Has switch to select either 6, 9 or 12V at up to 500mA. (We strongly recommend battery back-up in case the thief disconnects the mains at your switchboard).

Cat. MP-3012

**\$19.95**

## 6-7.5-9-12V 1 Amp Supply

This unit is approved. Ideal where more current is required. Simply plugs into mains to provide safe DC current.

Cat. MP-3016

**\$29.95**

## 12V DC 2 Amp Regulated Power Supply

Ideal for CB and workshop use where large amounts of power are required. DC connections via banana plug or screw terminals.

Cat. MP-3017

**\$74.50**

## Non Regulated 13.8V 2 Amp Power Supply

Especially designed for house alarms. It will power the alarm as well as charge the standby Gel battery. It will also power car radio/stereo and CB radios off the mains.

Cat. MP-3018

**\$52.50**

## Keyswitch Standard Type

Solid barrel type. 19.5mm mounting hole. SPST action. Supplied with 2 (two) keys.  
Cat. SM-1030

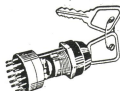
**\$7.50**



## Barrel Keyswitch

For high security installations. 4 pole 2 position.  
Cat. SM-1033

**\$10.95**



## Barrel Keyswitch - Cam Lock

Made from die cast zinc. Used in alarms, petty cash boxes, etc.  
Cat. SM-1029

**\$6.95**



## Alarm Tamper (Pin) Switch

Low cost spring loaded switch, simply make to frame (or earth) when pin is released (i.e. by operating car or cabinet door, etc.  
57mm overall, 12mm pin travel.  
Cat. LE-8775

**\$1.25**

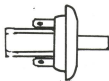
10 or more \$1.15 each



## Alarm Tamper Switch

Switch mounts behind alarm module or bell or whatever you desire. If device is tampered with or pulled from the wall, the alarm will be triggered. SPST.  
Cat. LA-5068

10 up \$2.40 each **\$2.60**



## Mecury Switch

Glass encapsulated 125V 3 amp AC. SPST.

Cat. SM-1035 **\$2.25**

10 or more \$2.05 each



## Blank Alarm Key

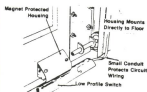
Have you ever tried to get another alarm key?  
It's very difficult to find blanks that are suitable. We now have available the exact blanks. No more worries!  
Cat. SM-1034

**\$1.20 each**

## Heavy Duty Reed/Magnet

Used for roller shutter doors, lifting garage doors or any wide gap applications. Supplied with strong magnet, flexible conduit connector, etc.  
Cat. LA-5073

**\$37.50**

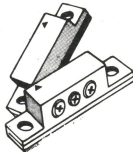


## Reed Switch/Magnet Assemblies

Now available from Jaycar Normally Open (N.O.) and Normally Closed (N.C.) on the one assembly. Saves buying either one or the other. Powerful magnets, self adhesive or screw mount. Screw terminating.  
- SELECTABLE NORMALLY CLOSED OR NORMALLY OPEN.  
Cat. LA-5070

**\$4.75**

10+ \$4.50 ea



## Concealed Reed (N.C.) Switch & Magnet Set

Simply brilliant! Just drill a recess in your door or window and the magnet flush mounts to be "invisible".

The reed switch segment is similarly mounted into the door frame or window frame and wired into your system.

**CAN'T BE TAMPERED WITH - PROFESSIONAL QUALITY**

Cat. LA-5075

**\$4.99**

10+ \$4.79



## Window Tape

To protect windows. Simply stick in place and terminate with circuit blocks. 32 metres x 6.4mm wide  
Cat. LA-5050

**\$12.95**



## Circuit Blocks

To suit window tape LA-5050. Self adhesive  
Cat. LA-5060 **60¢ each**



## Shock/Vibration Sensor

**88** NEW FOR

This device is designed to be used in Normally Closed (NC) circuits. It will initiate an alarm when a vibration of considerable force strikes the protector surface (it is adjustable). Protect walls, ceilings, windows, safes, cabinets, etc. Self adhesive.  
Cat. LA-5068

**\$5.95**



## Alarm Circuit Wire

Light figure 8 flex with trace, grey in colour. 14 x 0.14mm. Conductors 2. Ideal for use with reed switches, sirens, IR detectors, etc.  
Cat. WB-1702

**25¢ metre**

\$19 per 100 metre roll

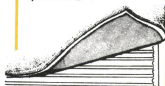
## Burglar Alarm Mat

A "mat" of two plastic sheets welded around the outside to contain a SPST switch mechanism.

When the mat is walked upon (or any part of the mat) a closed circuit results. Between 8 and 10mm thick. It will safely lie under any carpet without shorting or being shorted.

**SIZE 800 x 520mm**  
Cat. LA-5002

**\$24.95**



## Supertool

- POLISHING • CUTTING
- ENGRAVING • DRILLING
- SANDING • GRINDING
- MILLING • ERASING, etc.

The Supertool is a compact, precision power tool which has a multitude of uses.

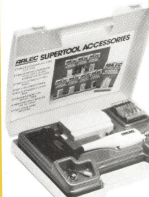
In and around the home, the office, factory, workshop, etc. it is ideal for miniature and electronic engineering, educational projects and drawing office work. Particular emphasis has been placed on the design of the casing to ensure optimum balance and ease of handling, with weight kept to a minimum. The on/off switch provides a switch lock for continuous running. The robust 12 watt motor operates at 10,000 revolutions per minute via a 12 volt plug pack which is supplied. The unit is supplied with 8 tools, 6 eraser sticks and a collet carrying five collets. Supplied in carry case, 2 year guarantee.

Cat. TH-1900

**\$75.00**

**SPECIFICATIONS**  
Operating Voltage  
Operating Current  
Spindle Speed  
Sail Torque  
Size (approx)  
Weight  
Chuck Type  
Power Supply

12V AC/DC  
1 amp  
10,000 rpm  
350g/cm  
141 x 42 x 31mm  
98 grams  
Collet  
12V/240V plug  
pack adapter



## Accessories for Supertool

### POLISHING

3 steel wire polishing/cleaning brushes for use on metal.

Cat. TH-1902

**\$17.95**

### DRILLING

4 high speed steel drill bits, 0.6, 0.8, 1 and 1.2mm for drilling holes in steel, non ferrous metals, wood and plastic.

Cat. TH-1904

**\$8.50**

### GRINDING

3 grinding bits for smoothing, cleaning and polishing.

Cat. TH-1906

**\$12.95**

### CUTTING

6 cutting/slitting discs with arbor for cutting, slicing, slotting, routing, etc., in metal, plastics and ceramics.

Cat. TH-1910

**\$14.95**



### ENGRAVING

Diamond engraving bit for engraving glass, hard plastic and metals.

Cat. TH-1908

**\$22.50**



### ENGRAVING

3 engraving/milling cutters for engraving on metals, plastics and ceramics.

Cat. TH-1912

**\$10.95**



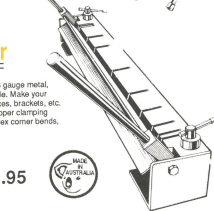
## Sheet Metal Bender

PANBRAKE

Handles up to 16 gauge metal, up to 445mm wide. Make your own chassis, boxes, brackets, etc. Unique slotted upper clamping bar allows complex corner bends, etc.

Cat. TM-3020

**\$119.95**



## Adel Nibbling Tool

Born in the USA

How things change. You can now purchase from Jaycat the original American Adel nibbling tool. Due to price rises from Asian countries we've been able to direct import the original tool (which we sold 10 years ago) and sell it at the same price as the Asian copy.

- Cuts holes - any shape over 7/16" and wiring
- Fits undersize holes to fit parts
- Suitable for steel up to 18 gauge, Aluminium 16 gauge, plastic and copper

Cat. TH-1765

**\$29.95**

### Replacement Punch

Cat. TH-1766 **\$21.50**



Note: You can't replace the punch in the Asian model.

## Nibbling Tool

This easy to use tool has plastic covered handles and is suitable for steel up to 18 gauge. It will, however, only cut in straight lines. Also suitable for plastics. Length 250mm.

Cat. TH-1768

**\$19.95**

Replacement Blades

Cat. TH-1769

**\$3.50**

**\$19.95**

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**\$3.50**

**MUCH EASIER TO USE THAN CONVENTIONAL NIBBLING TOOL**

## Pearl Catch

Incredibly handy tool for those moments when you need 4 hands. Will clip to and hold small nuts, bolts, washers, etc. for fixing in place.

Cat. TH-1842

**\$6.50**

**\$6.50**

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**\$6.50**

**\$6.50**

**\$6.50**

**\$6.50**



## Mini Bench Vice

Top quality mini vice

Cat. TH-1850

**\$10.95**



## Miniature Plastic Vice

- Strong suction base allows easy portability
- Single action lever to secure or release suction
- Plastic jaws with rubber pads open out to 40mm
- Size (Approx) 85 x 65 x 60mm

Cat. TH-1848

**\$5.95**



## PC Board Holder

That extra pair of hands when you need them.

Cat. TH-1982

**\$12.75**



## Tweezers

Steel, pointed end tweezers. Useful tool for holding parts for soldering, holding small screws in position, etc.

Cat. TH-1750

**\$2.95**

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**\$2.95**

**'T-Rex'**

Our wirestripper, nicknamed Tyrannosaurus Rex, is far from extinct! It's a great way to strip all sorts of cable without damaging the conductors. It's also a price breakthrough.

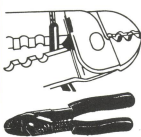
- Automatically adjusts to insulation diameter
- One hand operation

Cat. TH-1824

**\$12.95**
**Deluxe Crimping Stripper Tool**

Our crimping tool is suitable for a wide range of terminals, including ignition terminals. Tool also incorporates a wire cutter and stripper. Ideal general purpose tool for the glovebox.

Cat. TH-1828

**\$5.50**
**Neon Test Screwdriver**

A 3mm blade screwdriver with a built-in mains testing neon. Checks power points, extension leads, fuses, etc.

Cat. TH-2048

**\$1.95****"The Claw"**

This is a king size version of our Pearl Catch.

Incredibly handy tool for when you need 4 hands. Push the finger grip down at the top and 4 claws emerge from the bottom to grasp and hold small nuts, bolts, washers or virtually anything.

It measures 610mm long and is flexible. The best thing about the claw is its price. It's even less than our Pearl Catch.

Cat. TH-1843

**\$4.95**

NEW FOR 88


**Cable Tie Gun**

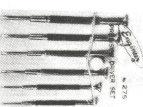
Will very easily fasten cable ties, and then cut off the excess. A very useful and handy tool indeed. Suitable for cable ties up to 12mm thick.

Cat. TH-1795

**\$14.50**
**Jewellers Screwdriver Set**

6 piece Jewellers screwdriver set with swivel heads in a handy case.

Cat. TH-2005

**\$5.95**
**Alignment Tool Set**

Set of 4 non-metallic tools for adjusting potcores, tuners, etc.

Cat. TH-1800

**\$4.95**
**Screwdriver Aligner**

200mm shaft

Cat. TH-1804

**\$3.35**
**Dalo Pen**

This special fibre tip marker is great for one-off PCB production. Etch resistant ink. Includes spare tip.

Cat. TM-3000

**\$4.75**
**Interlocking Parts Drawers**

Unique side and top/bottom keying system allows you to use just a few or build a whole wall of drawers as your parts expansion dictates. Quality designed drawer slides will not "rattle" or seize. Slide handle also takes identity cards. Single or double drawers available.

**SINGLE DRAWER**

Cat. HB-6300

**DOUBLE DRAWER**

Cat. HB-6301

**\$5.50 each**

10 or more

\$5.10 each


**Mini Cutters 100mm**

Standard finish quality carbon steel nippers with leaf spring return. Durable vinyl handles.

Cat. TH-1890

**\$9.95**
**Cutters 120mm**

Similar to TH-1890 except larger overall and with captive coil spring return. Vinyl handles.

Cat. TH-1891

**\$9.95**
**Flush Cutters 110mm**

A more compact version of the TH-1891 cutter except with Japanned (black metal) finish and leaf spring return. Vinyl handles.

Cat. TH-1892

**\$9.95**
**Pliers 120mm**

Quality carbon steel plier with classic style in-built wire cutter. Japanned finish to match the TH-1892 nipper.

Cat. TH-1893

**\$9.95**



## Desoldering Tool

As reviewed by Electronics Australia. This unit has many excellent features. Clear body to see when it's full, incredibly strong suction power. Made from high density polycarbonate plastic, one hand, easy to use operation and an automatic tip cleaner action. There's even a hole in it to hang on a hook. Supplied with Teflon tip.

Cat. TH-1820  
Replacement Teflon Tip  
Cat. TH-1822

**\$15.50**

**\$4.75**



## Olfa Knives & Cutters

Jaycar proudly introduces a range of high quality Japanese made cutters from Olfa. We are impressed with these products, and we are sure you will be too!

### ART KNIFE

Precision art knife supplied with not one or two spare blades, but a massive 25 replacements and a plastic storage box which houses both used and unused blades. Less than half the price of other art knives with comparable blades.

Cat. TH-1950

**\$9.95**



### SMALL UTILITY KNIFE

When the blade becomes blunt, snap it off! Housed in a metal (not plastic). Fully retractable blade, one hand operation.

Cat. TH-1952

**\$2.99**



### MEDIUM UTILITY KNIFE

Supplied with two blades, one snap off type and one saw blade, which will saw timber, plywood, plastic, etc. Retractable blade.

Cat. TH-1954

**\$14.95**



### TOUCH KNIFE

Measures only 40mm long and 4.5mm wide, and is ideal for cutting fruit, opening letters, and parcels, cutting string, a million uses. Every handbag, pocket, desk, glovebox, keyring should have one.

Cat. TH-1955

**\$1.99**



## IC Insertors & Extractors

### Low Cost

Up until now these have cost a fortune!

#### FEATURES

- CMOS SAFE conductive plastic
- Exclusive bent pin alignment guide in handle, 8 to 40 pins
- Ground strap can be connected
- One hand operation

#### INSERTORS

CIT1416 8 to 16 pins

Cat. TH-1808 **\$12.95**

CIT1820 18 to 20 pins

Cat. TH-1810 **\$13.95**

CIT22-22 22 pins

Cat. TH-1812 **\$ 9.95**

CIT24-28 24 to 28 pins

Cat. TH-1814 **\$14.95**

CIT36-40 36 to 40 pins

Cat. TH-1816 **\$15.50**



PICK UP & ALIGN  
BENT-OUT PINS



PREPARE TO INSERT



INSERT IC INTO SOCKET ALIGN BENT-IN PINS  
OR PCB



### EXTRACTOR

Deceptively simple looking device. One piece metal construction. 8 - 40 pins.

Cat. TH-1818

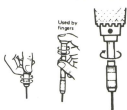
**\$ 4.25**



## Pin Vice

Used for holding small drill bits, reamers, etc. Great for enlarging undersized PCB holes.  
Cat. TH-1846

**\$16.50**



## Tapered Reamer

Holes too small? Ream 'em out! This heat-treated steel tool will enlarge holes from 4mm to 22mm. Also ideal for removing swarf from holes. Includes tommy bar.  
Cat. TH-1844

**\$15.95**



## Powerful 6000 rpm Mini Drill

Tons of torque. Just the shot for PCB work. 12V DC operated from external power pack. 1.2mm chuck capacity. Supplied complete with 1mm drill bit.  
Cat. TD-2450

**\$19.95**

DRILL BITS FOR PCB WORK  
Cat. TD-2408 0.8mm  
Cat. TD-2410 1mm  
\$2.20 each



## Allen key Set

Set of 8 handy keys complete in plastic wallet.  
Sizes: 1.5, 2, 2.5, 3, 4, 5, 5.5, 6mm  
Cat. TH-1840

**\$4.50**



## Adcola Soldering Station

Whilst Adcola equipment is very high quality, the fact that it is locally made is now a great benefit. The downward movement of the AS has made Adcola products very competitive - even against low cost Asian imports! We therefore strongly recommend that you seriously consider Adcola products - especially their temperature controlled soldering equipment before you buy inferior imported products.

### THE HEART OF THE TEMPERATURE CONTROLLED SYSTEM

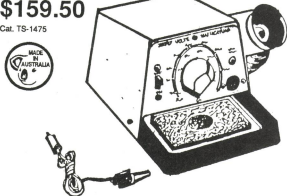
The unit will power either the CT-6, CT-7 or desoldering pencil. The E024 accurately monitors a temperature element wound in each of these irons. An electronic control circuit then meters power to the pencil in accordance with the temperature selected on the front panel of the E024. The temperature is continuously adjustable from 200 - 400 degrees centigrade (400 - 750 degrees Fahrenheit), accurate to an amazing  $\pm 5$  degrees centigrade! Power is supplied to the pencils via a 'zero crossing' controller. This effectively means that power to the pencils is switched on and off only at the point on the AC power supply where the voltage passes through zero. By switching power in this sophisticated way spikes caused by commutated AC are avoided. (The major competitors electro-mechanical switch operates randomly at ANY POINT on the AC!)

An extra special electrostatic shield is wound between the primary and secondary of the power transformer to virtually eliminate mains-borne spikes - no damage to MOS devices! To further reduce static voltage effect an optional auxiliary ground lead is provided to earth the equipment to be soldered to the same potential as the soldering equipment. In this way the effective tip EMI is limited to around 10 millivolts! This is far below the damage level for all MOS devices of course. We believe that the E024 unit has by far the best static control in its class! The E024 is supplied with generous mains cord, soldering guide, technical instructions (including internal schematic and parts list), soldering iron stand, tip cleaning sponge and ground lead. It is fused on the AC mains. It is guaranteed for 12 months.

#### BASE STATION ONLY

**\$159.50**

Cat. TS-1475



## Soldering Irons to Suit

### 40 WATT

The CT-6 is a light-weight pencil with a very high capacity heating element for very low thermal inertia. It is supplied with a #20415 1.5mm tip as standard. Also supplied standard are: burn-proof silicone rubber cord, thermal shield and plug for connection to E024 controller unit.

Cat. TS-1478

**\$47.95**



### 80 WATT

The CT-7 is similar to the above unit but with 80 watt thermal capacity.

Cat. TS-1480

**\$49.95**



### DESOLDERING TOOL

Type CT-207. This is similar to the pencils above except that it has a hollow temperature controlled tip (replicable) which is connected to a vacuum bulb located on the handle. The bulb is placed conveniently so that it can be depressed by the operators index finger.

Cat. TS-1476

**\$79.95** Tip for desolder tool Cat. TS-1477 **\$14.95**

**Spare tips for the Adcola CT-6, CT-7, S-30 & S-50 FOR CT-6 AND S-30 IRONS**

#20407 0.7mm chisel point Cat. TS-1484 \$5.95  
#20415 1.5mm chisel (standard) Cat. TS-1485 \$5.95

#20430 3mm chisel point Cat. TS-1486 \$5.95

**FOR CT-7 AND S-50 IRONS**

#50407 0.7mm chisel point Cat. TS-1488 \$6.95

#50425 2.5mm chisel point Cat. TS-1489 \$6.95

#50430 3mm chisel point Cat. TS-1490 \$6.95



## Weller WTCPS Station

new for '88

### START WITH A GOOD SOLDERING IRON

One of the best soldering irons money can buy. The Weller WTCPS uses an advanced temperature control system based on the Curie temperature of a magnet built into the tip. To change temperatures, simply change the tip. Low voltage transformer isolation means complete safety and the design ensures minimal leakage voltage at the tip - makes the iron perfectly safe to use with static sensitive IC's. Station comes complete with iron, tip, sponge and integral tip storage tray. The base houses the transformer, power switch and a stand for the iron.

The ultimate for the professional or serious hobbyist.

Cat. TS-1000

**\$149.50**

### SPARE TIPS

Screwdriver 2mm tip double flat

Cat. TS-1352 PTA - 315°

Cat. TS-1362 PTA - 370°

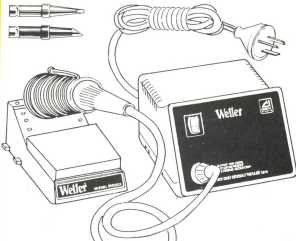
Cat. TS-1372 PTA - 430°

Spade 3.2mm tip

Cat. TS-1360 PTCC - 370°



**\$9.95** each



## Portable Gas Soldering Iron

new for '88

New generation soldering iron. Why bother with rechargeable batteries or generators any more. The Portasol needs no cords or gas bottles. All you need is a can of Ronson type Butane cigarette lighter fuel. A full tank will last about an hour, and it refills in seconds.

Portasol has an adjustable dial. You can vary it from the equivalent of 10 to 60 watts.

### A BRILLIANT NEW CONCEPT IN SOLDERING IN THE FIELD

- No cords, batteries or bottles
- Heavy duty, tip temperature up to 400°C
- Adjustable temperature - equivalent to 10 - 60 watts
- Hard working, up to 60 minutes continuous use
- Refills in seconds, uses standard Butane gas lighter fuel
- No leakage current to sensitive circuits
- Made in Ireland

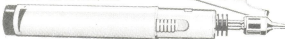
Cat. TS-1420

**\$42.95**

### TIPS TO SUIT

• 1mm TIP Cat. TS-1421 \$15.95

• 2.4mm TIP Cat. TS-1422 \$15.95



## "Hotstick" Soldering Iron

Ideal for the hobbyist and handyman. Our lowest price 240 volt quality iron has a stainless steel barrel and is supplied with free solder.

Spare tip Cat. TS-1453 \$4.95  
Cat. TS-1450

**\$16.95**



## Low Cost 25 Watt Iron

Ideal for the hobbyist and handyman. 240V operated with spare tips available. Lightweight. Tip temperature variation is well within limits suitable for electronic work. Complete with tip.

Cat. TS-1440

**\$20.95**

### SPARE TIP

Standard chisel Cat. TS-1443 \$4.95



## Jaycar Soldering Kit

Designed for general purpose soldering. This kit includes a 30 watt 240 volt soldering iron a quality metal stand with sponge, a length of solder and a roll of solderwick.

Cat. TS-1650

**\$31.95**



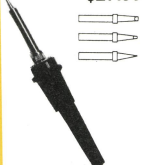
## 20 Watt Professional Iron

This great iron has all the features of those costing a lot more.

- 240 volt operating
- 370°C fixed temperature
- High efficiency patented heating element
- Iron clad chrome plated, long life interchangeable tips.

Cat. TS-1550

**\$27.95**



### IRON CLAD TIPS

This soldering iron uses high grade iron clad, chrome plated and pre-tinned tips. Tip life expectancy is many times that of conventional plated tips.

Cat. TS-1552 Micro chisel 1mm  
Cat. TS-1553 Mini chisel, 1.5mm  
Cat. TS-1554 Standard chisel 3mm

**ALL TIPS \$6.50 each**

## Adcola 240 Volt Irons

### S-30

A high quality 12 watt non T.C. iron suitable for general hobby use. Idies at the correct temperature for PCB work. Tips will not seize in iron. Uses same tips as CT-6 pencil.

Cat. TS-1492

**\$34.95**

### S-50

Similar to the above unit but with 16 watts thermal capacity. Uses same tips as CT-7 pencil.

Cat. TS-1494

**\$36.95**

## Replacement Tip

Instrument tip for Micron 30 watt, Arlec orange handle iron and Hotstick irons.

Cat. TS-1453

**\$4.95**

## Temperature Adjustable 240°C to 450°C

Excellent 240V iron, screwdriver temperature adjustable between 250 degrees C and 450 degrees C enabling very delicate soldering on low settings with surprising heat energy reserve on maximum setting.

Relative temperature is indicated by LED lamp brightness. Much lower cost than a soldering station.

Cat. TS-1460

**\$39.50**



## 12 Volt 15 Watt Economy Model

Ideal for light automotive use or field repairs. At this price an iron in your car, caravan or boat is cheap insurance against failed joints.

Cat. TS-1470

**\$11.50**



## Soldering Iron Stand

Holds virtually any iron for convenient use. Includes tip wiping sponge.

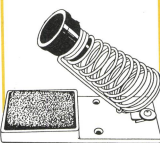
Cat. TS-1500

**\$10.95**

SPARE WELLER SPONGE

Cat. TS-1400

\$4.75 each



**"You can use Jaycar Mail Order Service from just about anywhere!"**



**Government Instrumentalities, Schools, Public Companies.**

If you wish to purchase from us, simply send us your official order and we will give you a complimentary 30 day account.

## TURN YOUR SURPLUS STOCK INTO CASH!!

Jaycar will purchase your surplus stocks of components and equipment. We are continually on the lookout for sources of prime quality merchandise.

**CALL GARY JOHNSTON OR BRUCE ROUTLEY NOW ON (02) 747 2022**

*Soldering Irons*

## High Quality VHF/UHF Mobile TV Antenna System

The "Mini-State" antenna system consists of a wide band YAGI type antenna on a turntable inside a fully sealed housing. An inbuilt masthead amplifier boosts the VHF band by 24dB and the UHF band by 12dB. A matching transformer changes the impedance from 300 to 75 ohms.

The sealed rotor assembly is connected to a wall plate via a 15 ft (4.2 metre) length of coax with 3 conductor rotor wire. The wall plate also has a coaxial outlet socket, a socket for a hand held rotor controller (which is also supplied), a 12V cigarette lighter socket (for 12V TV's etc) and an on/off switch for the masthead amplifier power.

The antenna housing weighs less than 3 kilos, is 533mm in diameter and 178mm thick. It presents a low windload and is very attractive compared to ordinary TV antennas.

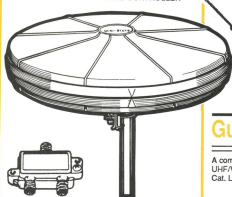
The Mini-State enables you to rotate the antenna to the signal source from the comfort of your chair to minimise ghosts and maximise signal. It is ideal for boats, caravans, outside broadcast vehicles, RV's - even at home (if you don't like ugly TV aerials). It is NOT cheap but quality never is. It is a fine piece of equipment which will give years and years of trouble free service. The complete Mini-State system consists of the enclosed weather-resistant antenna, matching transformer, amplifier, coax/control cable, wall plate and hand controller. It operates from 12V DC.

Cat. LT-3122

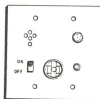
**\$399**



HAND CONTROLLER



MAST NOT SUPPLIED



NOT TO SCALE

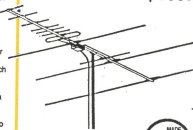


## UHF/VHF Antennas

### The Ghostbuster

Designed for areas where ghosting is bad.  
Cat. LT-3150

**\$109.50**

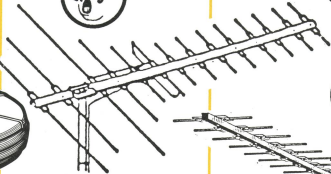


## Metro

For those who want to receive VHF as well as UHF. This is the one you need. Suitable for metropolitan areas. Use LT-3026 balun for coaxial.

Cat. LT-3160

**\$72.00**



## Gutter Grip

A combination aerial for good reception areas.  
UHF/VHF.  
Cat. LT-3175

**\$52.00**



## Stainless Steel Mast Mounting Bracket

Will accept up to 40mm dia. mast. Flanged to bolt onto base of antenna.

Cat. LT-3124

**\$19.50**

## 280mm Wedge Type Vehicle Mount

Lightweight but strong aluminium (40g) mount. 8 vehicle fixing holes. Bolts on bottom of antenna.

Cat. LT-3126

**\$49.95**

## 30ft Coax/3 Wire Rotor Cable

A 9.5 metre length of 75 ohm coax cable with connector fitted each end and the 3 wire rotor control in the same cord.

Cat. LT-3127

**\$49.95**

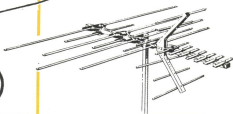
## UHF/VHF/FM Triband Antenna

Suitable for most VHF and UHF applications Triband antenna for VHF channels 2 - 12, FM channels and UHF channels 21 - 69.

Excellent performance for medium to poor signal areas.

Cat. LT-3145

**\$89.50**

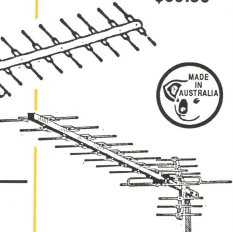


## UHF

This UHF aerial is designed for Band 4 reception for all capital cities. Use with a diplexer to combine with VHF antenna. This antenna has ten elements and a reflector which picks up more signals and reflects them back to the aerial.

Cat. LT-3180

**\$59.50**



## Band 4 and 5 UHF Antenna

If you need bands 4 and 5 you don't need to buy two aerials. Bands 4 and 5 on the one antenna, what a great idea.

FEATURES: Excellent gain -8dB, inbuilt balun, good directivity - front to back ratio 27dB. Gold anodised for long life, simple to install, European made.

Cat. LT-3178

**\$49.50**



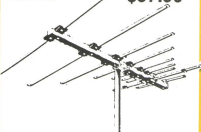
NEW FOR 88



## VHF Outdoor TV Antenna

If you don't need UHF this is the antenna for you. Excellent gain and directivity for areas with moderate signal strength. 300 ohms, use LT-3026 belun with coaxial.  
Cat. LT-3165

**\$57.50**



## Indoor TV Antenna UHF/VHF/FM

The ultimate indoor antenna - built-in mixer for UHF/VHF/FM - wide frequency band from 40MHz to 890MHz. Directional fine tuning possible with variable direction inner reflector - easy to mount - 75 ohm impedance with coaxial cable and plug.  
Cat. LT-3130

**\$31.95**



## UHF Set-Top Antenna

Designed for those who for one reason or another cannot have a rooftop antenna. Top quality in performance and design for those in a good UHF signal area. Easy adjustment for horizontal or vertical polarisation. Complete with lead and plug. Covers both band 4 & 5.  
Cat. LT-3140

**\$21.95**



## Rabbit Ears

Two telescopic antenna mounted in a sturdy cabinet which sits on your TV set. Telescopic rods are adjustable for maximum efficiency.  
Cat. LT-3110

**\$21.95**



## Spiromatic Indoor

For prime reception areas, sits on top of your TV. Popular spiral design.  
300 ohm cable supplied.  
Cat. LT-3100

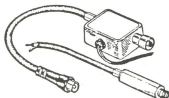
**\$7.95**



## In-Line Coaxial Amplifier

This great amplifier will reduce the loss from splitters and long cable runs. It can be used with a VCR or antenna. 10dB gain. 240V power supply included.  
Cat. LT-3815

**\$46.50**



## Antenna Signal Amplifier

This Australian designed VHF/UHF/FM indoor antenna signal amplifier is a must for poor reception areas. The unit has a VHF gain of -26dB and on UHF -37dB. Connection into your TV antenna system is via 75 ohm coax input and output sockets. Comes complete with approved (CS3069N) power supply - nothing else to buy.  
Cat. LT-3818

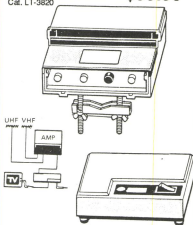
**\$99.95**



## Big Daddy Masthead Amp

If you have a real problem with TV reception at your weekend this will fix it. It will boost VHF a massive 24dB and UHF 22dB. That's about 4 times the smaller units available.  
Complete with 240V adaptor.  
Cat. LT-3820

**\$99.50**



## FM Indoor Antenna

Simple ribbon type antenna (dipole) gives good performance in strong signal areas.  
300 ohm termination.  
Cat. LT-3002

**\$2.50**



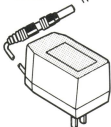
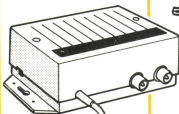
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**GORE HILL 439 4799**

## Indoor Antenna Amplifier/Splitter

This UHF/VHF and FM amplifier incorporates a 2 way splitter and covers all Australian frequencies. 2 x 6dB gain. Power supply supplied to run from 240V AC.  
Cat. LT-3810

**\$49.95**

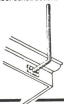


## Antenna Mounts

### Bargeboard Mount

Simply bolts onto bargeboard (below gutter) or other support. 1390mm long, galvanised steel construction.  
Cat. LT-3200

**\$11.95**



### Wall Mounts

Two lengths bolt onto wall and space antenna to clear eaves. Use with LT-3230 mast section. Galvanised steel, including U-bolts.  
28cm (11")

Cat. LT-3210

**69cm (27")**

Cat. LT-3220

**\$7.25**

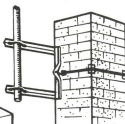
**\$10.95**



## Chimney Mount

Steel straps wrap around the chimney to securely support mast section (Use LT-3230, not supplied).  
Cat. LT-3225

**\$20.95**



## Gutter Mount Bracket

A handy small bracket to mount a TV aerial on a gutter plus 10 metres of 300 ohm cable.  
Cat. LT-3194

**\$12.50**

## Mast Section

2.4 metres long galvanised steel mast.  
Cat. LT-3230

**\$8.95**

## Cable Standoffs

Keep cable supports away from walls, gutters, downpipes, etc., for best performance.

### STRAP TYPE

To support cable away from mast.

Cat. LT-3252

**\$1.35 ea**

10 or more \$1.15 each



## U-Clamp/V-Block

For securely clamping mast sections, mounts, etc., at right angles.

Cat. LT-3235

**\$2.20 ea**

10 or more \$2.00 each



## TV Wall Sockets

Designed to match modern electrical fittings - white in colour.

### SINGLE

Cat. LT-3023

**\$3.75**



### DOUBLE

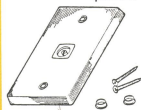
Cat. LT-3024

**\$4.95**

## Flushmount Wall Socket

Cable from aerial can be run to this outlet, then continued on to another one. It has built-in splitter as well as wall socket. Standard power point size.  
Cat. LT-3025

**\$6.50**



## Mini Wall Plate

Standard white mini wall plate with a cutout for either a 75 ohm snap-in insert or 300 ohm.  
Cat. LT-3030

**\$1.95**



## 300 Ohm Insert

Cat. LT-3032

**\$2.20**



## 75 Ohm Insert

Cat. LT-3031

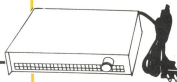
**\$2.65**



## UHF to VHF Tuneable Down Converter

Enables you to watch UHF channel 28 SBS on a VHF only TV. Tuneable UHF bands 4 and 5 to VHF channel 1. Has built-in amplifier to ensure that there is no signal loss. Power supply included.  
Cat. LT-3830

**\$99.00**



## Fly Leads

Leads to connect between TV and wall socket, TV and video. Terminated with standard 75 ohm plug or socket as used on TVs.

### PLUG TO PLUG 1.8m

Cat. AV-6580

**\$3.50**

### PLUG TO SOCKET 1.8m

Cat. AV-6582

**\$3.75**

### PLUG TO PLUG 4.5m

Cat. AV-6584

**\$6.95**

### PLUG TO SOCKET 4.5m

Cat. SB-6585

**\$6.95**

### PLUG TO PLUG 10m

Cat. SB-6586

**\$11.95**

### PLUG TO SOCKET 10m

Cat. AV-6587

**\$11.95**



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## Baluns

Essential for matching 300 ohm antennas, TVs and ribbon with 75 ohm coaxial and TV connections

### Outdoor

Aerial type with plug. Weatherproof balun connects 300 ohm TV or FM tuner.

Short length of 300 ohm ribbon with spaced lugs.  
Cat. LT-3026

**\$3.75**



### Indoor Balun

Connects 75 ohm coaxial via screw connections to a 300 ohm TV or FM tuner. Short length of 300 ohm ribbon with spaced lugs.  
Cat. LT-3027

**\$2.95**



### Indoor Balun

Lets you connect 300 ohm ribbon to a 75 ohm TV set. Screw terminals for input, coaxial plug output.  
Cat. LT-3021

**\$2.25**



### Indoor Balun

75 ohm socket for input and 300 ohm ribbon cable output. Also allows connection of TV games with plugs to a 300 ohm TV.

Cat. LT-3022

**\$2.25**

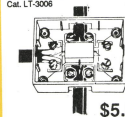


## Splitters

Essential for operating more than one set from a single antenna - don't try wiring them without one - it doesn't work.

### 300 Ohm 2 Way

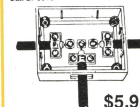
Screw connections  
Cat. LT-3006



**\$5.95**

### 75 Ohm 2 Way

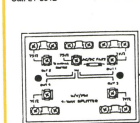
Screw connections  
Cat. LT-3010



**\$5.95**

### 75 Ohm 4 Way

Screw connections  
Cat. LT-3012



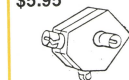
**\$9.50**

## TV & FM Splitter

This unit plugs into a 75 ohm wall socket and then either two TV's or one TV and an FM receiver can be plugged in.

Cat. LT-3020

**\$5.95**



## High Quality Splitters

For those who want the best.

High quality inductive splitters. If you need a splitter and you have long runs, or you are in a poor reception area you need a better quality splitter. Screw clamps for easy wiring.

### SPECIFICATIONS:

Insertion Loss	Side Loss
VHF UHF	VHF UHF
2 WAY 3.5 7	20 20
4 WAY 6.5 8	16 16

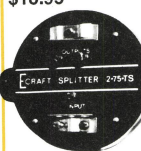
measured as dB loss

2 WAY Cat. LT-3007

**\$15.95**

4 WAY Cat. LT-3008

**\$18.95**



## TV Game Computer Switch

Allows you to easily switch between two inputs to your TV. The input can be TV aerial, computer, video game or VCR. The output has a small length of coax and a 75 ohm standard plug. Input sockets are standard 75 ohm type. Grab one for when you will need it.  
Cat. LT-3018

**\$5.95**



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## UHF/VHF Indoor Diplexer

This device allows you to connect 2 antennas (UHF and VHF) to the one socket on your TV. Output 75 ohms to TV.  
Cat. LT-3013

**\$10.50**

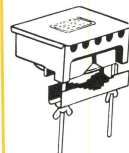


## Outdoor UHF/VHF Diplexer

Mounts directly onto TV mast. Connect two aerial cables (UHF and VHF) to diplexer, then only run one cable down to TV.

Cat. LT-3014

**\$11.95**



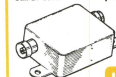
## FM Band Rejection Filter

Will filter signals from TV reception as well as neighbouring interference patterns giving a better picture all round.

Supplied with a 75 ohm coax socket in and out.

Cat. LT-3015

**\$7.95**



**CARLINGFORD 872 4444**

## Understanding Digital Logic Circuits

Designed for the service technician engaged in radio, television or audio troubleshooting and repair, this book painlessly expands the technicians expertise into digital electronics. Beginning with digital logic diagrams, the reader is introduced to basic adders and subtractors, flip-flops, registers and encoders and decoders. Memory types are also discussed in detail.

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## IC Substitution Manual

This book is as good as they come. Lists all of the current ICs from 108 of the western worlds IC manufacturers. National Semiconductor lists 19 pages, (4 cols/page) of their products, Motorola 19 pages, RCA 9 pages and Texas 18 pages. Many obscure (to Australia) manufacturers are listed. And that's only half the book! The other half of the book lists the generic number of the IC.

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## Up-to-Date World Transistor Comparison Table

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## CMOS Cookbook

ical books on the market, this cookbook gives you a solid understanding of CMOS technology and its applications to real world circuitry. The author explains how CMOS differs from other MOS designs, how it is powered and what its advantages are over other constructions. A mini catalogue is included which lists over 100 devices, giving their pinouts and application notes. The final chapter shows you how to put all the previous information together to construct a number of large scale working instruments.

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## Ian Ridpath Series

Ian Ridpath was born in Canada, although he and his family now live in Auckland, New Zealand. He has written articles for 'Q.S.T.' Magazine, 'Break-In' and Amateur Radio Action. Ian is currently a tutor in Electrical Engineering at Manukau Technical Institute in Auckland. Each of the four books described below is very clearly written. The style is just as if you, as a student, had taken notes down from a lecture. The drawings are mostly hand-drawn and are very clear. We are very impressed with the comprehensive technical nature of these publications and thoroughly recommended them only to people who want to be thoroughly competent in electronics theory.

## Amateur Radio & Electronics Study Guide

By Ian Ridpath

This book is unbelievable. It covers from DC & AC theory, description of operation of common electronic components, magnetism, reactance, resonance, semiconductors (all types), mains power supplies, amplifiers, oscillators (then a question and answer section on these), a further section on radio transmitters, receivers, propagation, aerials, transmission lines, test instruments and digital circuits. A further question and answer section follows! It also recommends further reading if you are a Novice Amateur Radio operator this would be an ideal book to read towards getting your full ticket.

216 pages, 212 x 156mm, softcover  
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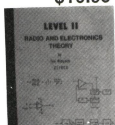
## Level II Radio & Electronics Theory

By Ian Ridpath

This book assumes some electronics knowledge and concentrates on specific areas viz: power supply design (inc. switchmode), class A, B & C amplifiers, FM, SSB & PLL synthesis, waveform analysis, bode plots and clippers. Then a digital section which includes a treatise on digital circuits, logic and Boolean algebra. A separate chapter on microprocessors is included. Questions and answers on all subjects included.

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This is basically a set of notes that deals with DC biasing of bipolar and Mosfet transistors. Both bias design and analyses of such circuits is covered. It assumes that the reader is technically familiar with the characteristics of the devices discussed. This book would be a must for anyone who was contemplating amplifier design, etc. 40 pages, 245 x 175mm, softcover.  
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By Ian Ridpath

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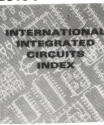
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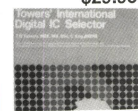
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## International Digital IC Selector

This book supplies over 13,000 American, European, British & Japanese digital integrated circuits, with electrical and mechanical specs, manufacturers names and pinouts. Recommended substitute part numbers also given. This is an essential book for anyone engaged in service of computers, or other digital equipment or the serious digital enthusiast. Size: 178 x 247, softcover  
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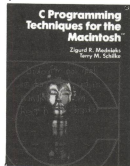
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An excellent reference for electronics engineers who use computers to design and verify the operation of electronic designs. The author uses practical, everyday examples such as burglar alarms and traffic light controllers to explain both the theory and the technique of electronic design. CAD topics include common types of logic gates, logic minimization, sequential logic, counters, self-timed systems, and tri-state logic applications, packed with practical information, this is a valuable source book for the growing CAD field. 448 pages, size 190 x 248, softbound. Cat. BS-0418

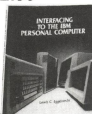
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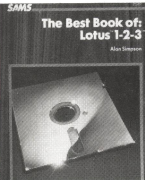
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Graham Wideman  
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Topics covered include:

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- Selecting options
- Simple cabling
- Testing and monitoring gadgets
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- Basic system approaches for local area networks, their advantages, disadvantages, access techniques and network topology.
- Specifics of network security, the protective measures being used and their rationale
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When accessing Videotex services such as Viatel, the Megamodem will automatically convert the split baud rate of Videotex services such as Viatel to 1200/1200 baud.

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X3/X28 compatible, allowing the user to take advantage of the many services available via AUSTPAC.

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A built-in speaker monitors progress of dialling and answering. The 8 LED's display modem status and data transfer information.

### SPECIFICATIONS

#### Data Standards:

CCITT V21, Bell 103, CCITT V22, Bell 212, (CCITT V23 - model 123 only)

#### Data Rates:

300/300, 1200/1200, (1200/75 & 75/1200 model 123 only)

#### Interface:

CCITT V24 (RS232C)

#### Power Requirements:

240V AC power consumption <1W

#### Dimensions:

27(H) x 120(W) x 165(D)mm

#### Weight:

Approx. 250 grams

#### Command Set:

Hayes "AT" compatible

#### Warranty:

Extended 12 months

#### Front Panel Indicators:

HS High speed  
AA Auto answer  
CD Carrier detect  
OH On hook  
RD Receive data  
SD Send data  
TR Terminal ready  
MR Modem ready

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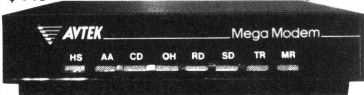
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### Features Include:

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- Can be powered by the computer directly - for example Microbee
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Cat. XC-4825  
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### HIGH DEFINITION COMPUTER MONITOR

There are a number of low cost "Hobbyist" monitors around these days at prices unheard of year or so ago. However, they all suffer from poor to medium definition or resolution - hence eye strain becomes a real headache.

The situation has all changed with this superb Micron Series III non-glare, naturally, and screen character resolution well worthy of mating up with top end personal or professional computers.

- 1050 lines resolution at centre screen
- 22MHz bandwidth
- Video input impedance switch allows networking use
- Incredible - REPEAT - incredible resolution.

### SPECIFICATIONS

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Green Phosphor

#### Front Controls

Power on/off, brightness/intensity, display centering

#### Rear Controls

Background intensity, vertical & horizontal adjustments etc.

#### Input Impedance

switch 75/10K

#### Bandwidth

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#### Resolution

1050 lines minimum centre screen

Cat. XM-4500

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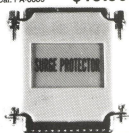
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## RS232 Surge Protector

The RS232 surge protector is used to protect RS232 ports from the possibility of costly damage from large voltage peaks caused by lightning or other power problems. This unit uses Metal Oxide Varistors (MOV) to protect pins 2, 3 & 7. It has one male and one female connector with all 25 pins connected straight through and with MOVs connected between pins 1 & 2, pins 1 & 7. The MOVs will suppress any voltage above 26 volts without affecting the normal RS232 voltage levels. The MOVs are capable of handling one joule of energy and 250 amps peak current.

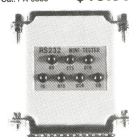
Cat. PA-0885 **\$19.95**



## RS232 Mini Tester

This tester indicates the presence of all important interface line by LED illumination when signal is active. All 25 pins are connected straight through.

Cat. PA-0886 **\$19.95**



## RS232 Mini Patch Box

The RS232 mini patch box is used to make custom RS232 interfaces. It consists of a small board with a connector on each end. All 25 pins of each connector go to the 25 solder pads. By custom wiring these pads many different inter-faces can be built: null modems, pin reversers, etc. Also a cable can be connected to tap signals from the RS232 line.

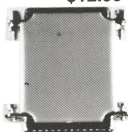
Cat. PA-0880 **\$9.95**



## Female/Female Gender Bender

Saves modifying or replacing non mating RS232 cables by changing from male to female. All pins wired straight through.

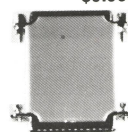
Cat. PA-0884 **\$12.95**



## Null Modem

The RS232 null modem is used to replace a set 25 pin RS232 connectors with transmit DATA and receive DATA across CONNECTED.

Cat. PA-0883 **\$9.95**



## Computer Leads

25 D male to Centronics  
Cat. PL-0854 **\$28.95**

25 D male to 25 D female  
Cat. PL-0855 **\$32.95**

25 D male to 25 D male  
Cat. PL-0856 **\$30.95**  
All leads 1.8 metres long.

## Computer Cassette

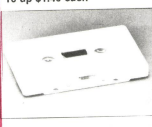
Exceptionally good quality, leaderless blank cassette in the usual plastic case.

SIZE C20

Cat. XC-4715

**\$1.60 each**

10 up \$1.40 each



## Centronics Printer Switch

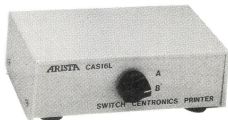
Ideally suited in a situation where there are two computers using one printer, or one computer using 2 printers. Saves continually plugging and unplugging leads.

- FEATURES
- 36 pin gold plated female connectors
  - A-B switch allows 1 in 2 out or 2 in 1 out
  - No power requirements
  - Housed in a sturdy metal box measuring 175(W) x 55(H) x 115(D)mm

Cat. XS-7000

**\$99.00**

**NEW FOR 88**



## 5.25" Disc Storage Cabinets

Efficient and practical. Protect your valuable discs from loss or damage.

FEATURES

- Smoked plastic hinged lid
- High impact plastic base
- Easy access handle for opening and acrying
- Lockable with 2 keys supplied
- Dividers supplied.

TWO SIZES AVAILABLE:

HOLDS 50

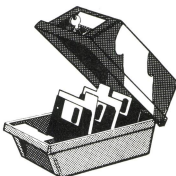
Cat. XC-4760

**\$19.95**

HOLDS 100

Cat. XC-4765

**\$25.95**



**NEW FOR 88**

## Lower Prices on Diskettes

Famous brand Memorex Floppy Discs.

5.25" SSDD SINGLE Cat. XC-4750 **\$2.75**

5.25" SSDD BOX 10 Cat. XC-4751 **\$19.95**

includes library box

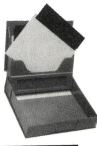
5.25" DSDD SINGLE Cat. XC-4755 **\$2.95**

5.25" DSDD BOX 10 Cat. XC-4756 **\$21.95**

includes library box

3.5" DSDD BOX 10 Cat. XC-4740 **\$49.95**

Library Box - hold 10 5" discs Cat. XC-4758 **\$4.95**



**CARLINGFORD 872 4444**

## Texas Instruments Calculators

Jaycar is proud to announce that we have been appointed a distributor for the very high quality range of Texas Instruments calculators.

### TI-1103

Handy everyday calculator in unique carry case!  
 • Compact, economical eight digit, six function calculator with large keys • Full function  
 • Automatic percent key, automatic constant, square root key • Automatic power down  
 Cat. QC-7172  
**\$15.95**

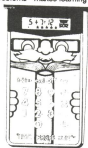


### Little Professor

A marvelous way to teach young children their maths tables plus addition, subtraction multiplication and division!

• Tables mode gives practice in math tables • Comes with Little Professor Activity Book • Your child gets two chances to solve the problem before Little Professor gives the correct answer • Contains over 50,000 pre-programmed problems • makes learning what it should be • FUN!  
 Cat. QC-7160

**\$34.95**



### TI56 Programmable

Ideal for Tech Studnets, at a bargain price - factorials, Imperial to metric conversions (or visa versa), engineering and scientific notation, integration, statistics, polar/recangular conversions, stores a constant (even when off), algebraic operating system. Operates in proper mathematical order. 8 digits and 2 exponents. Degrees, radians and grads.  
 Cat. QC-7174

**\$49.95**



**88**

## Fans

Due to our bulk buying we have been able to really slice up the prices on 240V (80mm) 3 1/4" fans in fact the prices are so low we thought we had made a mistake!

### FEATURES:

Super quiet, sealed sleeve bearings, die cast frame.  
 Cat. YX-2514

240V 119mm (5") FAN

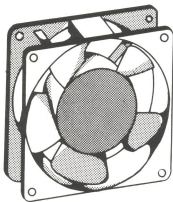
**ONLY \$27.50**

10+ \$25.50

240V 80mm (3 1/4") FAN

Cat. YX-2510

**ONLY \$24.95**



### Fan Finger Guards

Cat. YX-2511 for 3 1/4" fan  
 Cat. YX-2515 for 5" fan

**\$2.20 ea**



### TI-36 Solar

Performs 89 scientific functions, magnificent helpful guide book included!

• Designed for high school and college students • Scientific functions include logs, reciprocals, powers, roots, factorials, combinations, permutations, hyperbolic, complex numbers, polar/recangular conversions and trig calculations, including inverses in degrees, radians or grads • Statistical functions include mean and standard deviation, normal distribution • Enter numbers and perform calculations in binary, octal, decimal, or hexadecimal number bases. Convert numbers. Perform mixed calculations • Floating decimal, scientific notation or engineering notation • 10 digit/2 exponent display • Low light solar cells • Guidebook, vinyl wallet and quick reference guide.  
 Cat. QC-7170

**\$49.95**

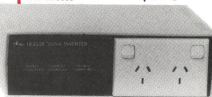


## 12 - 240 Volt 300 Watt Inverter



This compact design features a toroidal transformer and automatic regulation, current limiting and thermal overload protection.  
 Fully built and tested.  
 Cat. MI-5000

**\$379**



## 12V DC - 240V AC Sine Wave Inverter

**88**

A technical miracle designed by Jaycar engineering staff.

We are proud to announce a state-of-the-art DC-AC Inverter with full 300VA rating at a price which directly competes with crude square wave models. Our unique design uses switchmode technology to achieve a precise 50Hz sine wave with less than 4% distortion. (AC mains can be higher than this). More importantly, we are achieving around 85% EFFICIENCY with the unit. This is far better than most square wave types.

The Jaycar sine wave inverter has special housekeeping circuits which totally protects the power switching componentry from overload, short circuit, very bad power factors, etc! It also protects YOUR BATTERIES by monitoring their condition! LIGHT BUT RUGGED. The Jaycar sine wave inverter weighs less than 1kg of many inferior square wave inverters on the market at present, yet it is built to last many years.

Remember, many 240V appliances do not run properly on crude square wave inverters. Out unit gives them the power that they were designed for RMS.

We are proud to advise that this product is designed and made in Australia.

### SPECIFICATIONS

- 12V or 24V DC input 25-30 amps drain
- Output 240V AC nominal 50Hz sine wave
- Efficiency 80-90% depending on load, power available etc.
- Distortion <5% typical 3% resistive load
- Dimensions 260(W) x 220(D) x 80(H)mm
- Auto power on (can remain permanently on, will not draw current until load appears at 240V socket).
- In other words you can treat it like a normal power point!

Cat. MI-5020



**\$399**

## Cyclic (Endless Loop) Tape Player

**THIS IS NOT A KIT**

Simply record a message onto the unit (microphone not supplied) and you can have a message from 15-30 seconds long repeated continuously or when necessary. Built in amplifier - only needs a speaker. Dimensions: 70(W) x 56(D) x 45(H)mm  
 Weight 86 grams.  
 Cat. YT-2720

As featured in Silicon Chip project March '88

**\$29.95**

**88**



## Rover Negative Ion Generator

Yes, we've made another scoop purchase. The importer contacted us with his dilemma and we purchased a quantity of these fully imported fully guaranteed air purifiers. These units are 240 volt operated, draw about 1/2 watt, deliver about 250 billion ions per second, and cover about 25 square metres. It's even supplied with a Tester PC board and spare needles. If you've ever wondered about negative ion generators, this MUST be the time to buy one. These were selling for about \$80. Yacpar has a limited quantity available for:

Cat. YX-2905



**\$29.95**  
**SAVE \$50**

## Hand-Held Magnifiers from tasco®

We now stock a fantastic range of low-cost (BUT HIGH QUALITY) hand held magnifiers from TASCO company. All models are self illuminated, powered by perlight or C batteries for maximum convenience. They are great for checking PCB cracks, dry joints, poor joints, solder bridges, etc.

## Model 9700

Pocket illuminated microscope. This convenient magnifier will operate at 30X mag. It will easily show the individual process colour dots of printed colour illustrations. Focusable.

Cat. GM-3520



**\$24.95**

## Model 9536

This is an ambidextrous magnifier with a large 100 x 50 lens with bifocal inset. Illuminator hinges out from the case and closes flush. High quality. Focal distance 190mm.

Cat. GM-3512



**\$27.95**

## Model 9532H-R

Bright red torch style unit. Polished glass lens 82mm in diameter. Focal distance 188mm. Uses 2 x 'C' cells for long life. Weighs 275 grams.

Cat. GM-3510

**\$14.95**



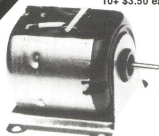
## Hobbyist Motors

3V Small motor, suited for experimenters and hobbyists. Measures 40 x 40 x 35(H)mm. Supplied with mounting plate and lead wires. Quality Johnson Brand.

(SPECIFICATIONS: - Operating Voltage: 1.5 - 4.5V - Operating Torque: 26.5gcm - Current Drain: 1 amp - Speed: 5,100 rpm - Output: 1.35 watts Cat. YX-2700

**\$3.95**

10+ \$3.50 ea



6V. This motor measuring 38 dia and 35mm long (plus shaft 10mm long) has high torque, modest current consumption. It is ideal as a cassette deck replacement motor. It is very high in quality - the motor itself is rubber mounted into an outer case, with screened power leads. Ideal also for toys, robotics, etc. 2400 rpm. No mounting plate.

Cat. YM-2702

**\$1.95 ea 10+ \$1.50 ea**

## Solar Powered Exhaust Ventilator

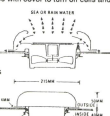
The Sunvent is a high capacity solar cell and DC motor powered fan in a well designed cowling. The cowling has been cleverly designed to keep water out and back draughts out.

Simply cut a 120mm hole in a bulkhead or deck - or whatever - and the Sunvent will remove stale damp air and out down midweek growth. It will extract dangerous LP gas or petrol fumes safely as the motor is sealed. The Sunvent is at its best in bright sunlight but will work quite well even on bright cloudy days. It will move about 35 cubic metres of air every half hour in good conditions. Supplied with cover to turn off cells and stop all airflow.

- Boats
- Caravans
- Port-a-Loos
- Greenhouses
- Sheds
- Holiday homes
- Backyard dunnies
- Kitchens
- Weekendenders etc

Cat. YX-2500

**\$49.95**



LESS THAN HALF THE PRICE OF NEAREST EUROPEAN MADE EQUIVALENT!

## Motor/Gearbox Kits

Each of the kits shown below contains a motor with press-fit brass cog, gearbox housing, 3mm x 110mm steel drive shaft, 2 intermediate shafts, 7 gearwheels and 6 nylon bushes.

The motors will run from a source of 1.5 - 4.5 volts DC and depending on load consume between 200 - 800mA. A typical gearbox arrangement is shown in the exploded drawing.

Two sizes are available, YG-2710 with a (small 20mm dia.) motor and the YG-2712 with 25mm motor with higher torque and oilite bearings. All components (apart from the motor) are UK or French made.

### SMALL MOTOR

Cat. YG-2710

**\$14.95**

### LARGE MOTOR

Cat. YG-2712

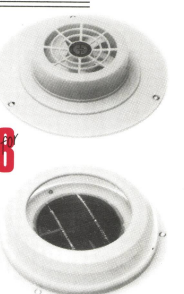
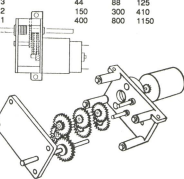
**\$18.95**

#### REDUCTION TABLE YG-2710

No of gear	1.5V rpm	3V rpm	4.5V rpm
6	3	5	6
5	10	18	24
4	32	58	74
3	96	180	230
2	290	540	700
1	900	1700	2200

#### REDUCTION TABLE YG-2712

No of gear	1.5V rpm	3V rpm	4.5V rpm
6	2	4	6
5	5	10	14
4	16	32	45
3	44	88	125
2	150	300	410
1	400	800	1150



New Products

## New Clock Movements Pendulum Driver

This small module measuring 130(L) x 60(W) x 35(D)mm uses 1 x AA cell. It causes a suspended arm within the module to swing back and forth. A suitable pendulum can be attached to the bottom of the arm. (Note: pendulum driver is NOT a clock). Battery (alkaline) will last over a year.  
Cat. XC-0110



**\$14.95**

## Quartz Movement With Switch Contacts

This is virtually identical to our XC-0100 standard movement except that it has a set of switch contacts that close every hour. These contacts can be used to trigger the "melody modules" see elsewhere (this page).  
Supplied with hands.  
Cat. XC-0105



**\$16.95**

## MD-01 Melody Module 12 Songs

This module consists of 2" speaker with electronics mounted on the speaker frame. A single AA battery holder is attached. When the switch wires are shorted the module plays one tune from its repertoire of 12. It cycles through the 12 until it comes back to the first. (Typical tunes are nursery rhymes).  
Cat. XC-0115



**\$12.95**

## MD-02 Westminster Chime

This module (similar in appearance to the MD-01) reproduces a "Westminster chime" when activated. It is also supplied with a neat little "test button" switch.  
Cat. XC-0120



**\$14.95**

## MD-202 12 Songs Plus Chime

If you hear "Oh, give me a home where the Buffaloes roam..." you know its 3 o'clock! After each tune a sombre chime rings out once for each hour of the day. Supplied with test switch. Really nifty!  
Cat. XC-0122



**\$14.95**

## "Twinkle, Twinkle Little Star" Module

This tiny module measuring 45(L) x 30(W) x 4mm (thin!) is the module that you find in those crazy musical Xmas cards. When tiny spring switch contacts are closed it plays "Twinkle, Twinkle Little Star". Absolutely useless and eventually annoying. Great fun to build into anything ghoulish!  
Cat. XC-0130

**\$3.95**

## LCD Thermometer Travel Alarm Clock

BRAND NEW DESIGN

It's about the size of a credit card, measures 85 x 55 x 8mm thick and is supplied in a handy wallet. Ideal for travelling. It has an alarm which is LOUD enough to wake even a heavy sleeper AND it has a snooze function. It's easy to set the time and alarm time. Display temperature in either Celsius or Fahrenheit. Uses one LR-44 battery.

Features:  
• Easy to read • Temperature in °C or °F • Loud alarm  
• Snooze setting • Easy to set • Small size • Carry wallet • Quartz accuracy  
Cat. XW-0392

**\$29.95**



## Digital Alarm Thermometer/Clock

This great new product has a built-in temperature sensor, so displays the temperature in both Celsius and Fahrenheit. It also tells the time. An alarm will sound when the temperature falls below or above a preset temperature. Handy pocket size, measures 53 x 82 x 22mm. Temperature measuring range -20°C to 70°C - 0°F to 160°F. Use one AAA battery.  
Cat. XW-0390

**\$27.95**



## Quartz Clock Compass

This great small product has many applications. It's a quartz digital clock and a compass in one small, handy size.  
Cat. XW-0250

**\$5.95**

## Quartz Crystal Clock Movement

- Very compact
  - Self starting one-second stepping motor has strong torque
  - Powered by 1.5V AA battery that lasts for one year
  - ± 15 second/month accuracy
  - 56mm square, 15mm deep
- Fit your own custom clock face. Great for novel applications such as fitting to pictures, boxes, photographs etc.

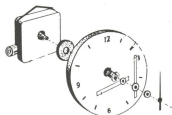
## SUPPLIED WITH 3 SETS OF HANDS \$12.95

Cat. XC-0100

Includes sweep second hand

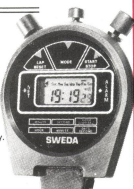


Assembly example for quartz clockworks:



## Stopwatch

Attractive all weather stop watch as well as a 5 function watch. (Day, date, etc). Complete with a generous length of knitted lanyard. Very easy to use. Quartz controlled for greater accuracy.  
Cat. XW-0380



**SAVE**

**\$5 on  
1987 Price - \$11.95**

## 30 Metre Quartz Digital Watch/Stopwatch

5 functions - hours, minutes, seconds, months, date, lap time, 24 hour and alarm.  
Cat. XW-0305

**\$12.95**



## Robotics Economy "Friendly Little Robot"

This unit is roughly 150mm diameter and 210mm high. It is programmable via a 8-key membrane keypad on its chest. Programmable actions include: music sound, flash 'eye' (light on head), turn in either direction, circle, etc. Up to 18 consecutive entries are permissible. This robot also features a very effective tactile bumper switch and movable arms which can grip small objects. Uses 4 x AA & 1 x 9V cell (not supplied) Cat. XR-1020

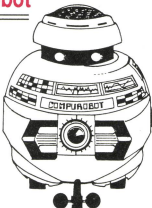
**\$49.95**



## Value Compurobot

A very sophisticated robot for the price. This unit which measures roughly 150mm diameter and 165mm high. This microprocessor controlled unit is programmed via a 25 key keypad on the 'head' of the robot. Up to 48 separate routines can be entered into a program. The robot has a multi-speed gearbox, can travel in 4 separate directions as well as at angles and curves. It has lights and can make sounds. Hundreds have been sold to primary schools throughout Australia. Requires 4 x AA & 1 x 9V cell (not included). Cat. XR-1024

**\$69.95**



## Performance Compurobot II

This highly sophisticated robot has it all. The robot is programmed via a wireless infra-red hand held controller with a 25 key keypad. A very comprehensive 30 page instruction manual is also provided. Up to 64 program steps can be accommodated in the robot memory. The unit will go in any direction as well as make a number of different noises, flash lights, etc. It beeps every time a key entry has been entered so that it verifies entry. The robot has two (non-motorised) mechanical arms to actually carry a payload. A crayon attachment is also provided to enable the robot to 'draw'.

When the IR controller is not in use the robot has a holder to carry it about. Another very valuable feature is an auto-turn-off facility, which conserves battery life. A highly recommended product. Measures 230(H) x 210(W) x 175(D)mm. Rugged ABS plastic case. Uses Japanese quality Mabuchi motors. Batteries required 4 x C (for robot); 4 x AA (for controller). Cat. XR-1028

**\$129.95**



## FM Wireless Intercom

These are great for homes, between garage/workshop/office and house, between rooms, grandparents upstairs, next door neighbours etc. The built-in monitor control allows you to put one in the children's room which transmits continuously, telling you when the babies are crying. Great for the office, between upstairs/downstairs, between offices - the possibilities are endless. To connect the intercoms, just plug into 240V power points and they transmit through the cable already laid. The only restriction is that both intercoms must be plugged into the same phase. (A phase usually incorporates 4 - 8 houses). Two channel operation for private conversations. Cat. AI-5500

**\$89.50** per pair



## 2 Station Wire Intercom

These intercoms are battery operated or can be used with our 240V adaptor (Cat. MP-3005 @ \$14.95). Wire is supplied to connect all units. Built-in call tone, so any station can contact master, even when master is switched off. Cat. AI-5502

**\$29.50**  
per pair



## Ultrasonic Pest and Insect Repeller

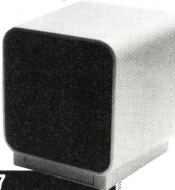
PESTREPELLER is effective in controlling mice, rats, roaches, ants, fleas, crickets, silverfish, waterbugs, moths and most other common pests.

Laboratory research has shown ultrasonic sound waves attack the auditory system and nervous system of most common pests causing them pain and discomfort.

- 190dB of sound waves are out of the range of hearing of humans and most household pets such as dogs, cats, fish and farm animals.
- Dimensions 100 x 90 x 80mm
- Power supply adaptor supplied 240V AC/9V DC
- Frequency range 30kHz to 65kHz variable
- Output level 130dB.

Cat. YS-5510

**\$39.50**



**BRISBANE 07 393 0777**

## Jaycar JVE-1 Video Detail Enhancer

### What is a Video Enhancer?

It is a black box that connects between two VCR's to improve the quality of a recording of an original tape. No tricks, just sound engineering practice. They have been around TV studios for years and are now being built into the latest VCR's. The Jaycar unit was designed by a staff member of a well known Australian University and we have bitten the bullet by making them in Australia. The unit works well (some say better) than units costing up to two hundred dollars or more. It is the only 625 line 50 frame PAL-D Australian designed and made unit available that we know of. The unit features enhance, core/gamma control and bypass switch. It will drive up to 3 VCR's at once with no degradation and works well as a Video Distribution Amplifier as well. It is supplied with excellent documentation, is not a kit and is guaranteed for 3 months.

### SPECIFICATIONS

- Maximum enhancement not less than +8.5dB @ 2MHz
- Enhance disabled (bypass) response, DC to 5MHz,  $\pm 0.5 \pm 1$ dB
- Colour subcarrier 5dB notch frequency, tunable to 4.43MHz,  $\pm 0.5$ dB, all settings
- Amplifier group delay, less than 0.075µs
- Signal handling capacity not less than 1.35 volts P-P (sync. is clipped first)
- Power 12V AC @ 100mA
- Controls: on/off, enhance, enhance/bypass switch, core/gamma control
- Input connector RCA socket
- Output connectors RCA x 3

### DESIGN FEATURES

- A unity gain notch at the colour subcarrier frequency, whose purpose is to prevent chrominance to luminance errors at high enhance levels.
- A closed loop configuration with lead lag compensation to achieve stable, well defined gain
- DC coupling eliminating large capacitors in series with the video signal and achieving DC response for applications requiring it
- Low output impedance prior to termination resistors, enabling up to 3 outputs to exist and be used or left unterminated
- A level dependent closed loop response or gamma control (Core)
- Clip on negative going signals at -67 volts into 75 ohms to prevent sync. errors owing to overshoot

Cat. AV-6501

**\$79.95**

### 12 VOLT AC PLUG PACK POWER UNIT

Cat. PM-3020

**\$13.95**



## Key Fob Transmitter

This unit measures 60(L) x 34(W) x 14(D)mm. It is supplied with a vinyl slip wallet (which is pretty useless). It is powered by a 12V cigarette lighter type battery. You can custom code it with from 1024 combinations. Instructions supplied. Works the LR-8810 Remote Control Receiver.

Cat. LR-8814

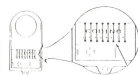
**\$27.95**

## Remote Control Receiver

The hand controller LR-8814 will latch this unit on and off with alternate depressions of the button. A relay (SPDT) with 5A contacts is actuated. This relay can be used to control solenoid door locks as well as no-entry delay burglar alarms, etc. Dimensions 122(W) x 90(D) x 30(H)mm.

Cat. LR-8810

**\$54.95**



new for 88

## Ultraviolet EPROM Eraser

This is the proverbial answer to a maidens prayer! It's all very good being able to program EPROMs easily but how do you ERASE them quickly and safely. You can put them out in the sun for an undetermined time or use a special high power UV tube in an unprotected 20W fluoro batten. You could also end up with a white walking stick!

If you need to regularly erase the contents of EPROMs (even NEW EPROMs could be corrupted with random data) then this is your most cost-effective solution. It will erase up to 9 x 24 pin devices in complete safety to your eyes and your chips. In around 40 minutes for 9 chips (less for less chips). This US-designed product has a special safety conductive-foam chip drawer and has a double-insulated design for your safety.

We are very excited about this product and we are sure you will be too.

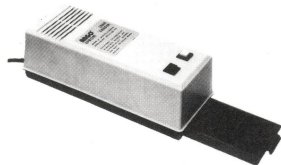
### FEATURES

- Erase up to 9 chips at a time
- Chip drawer has conductive foam pad
- Mains powered
- High UV intensity at chip surface ensures thorough erase
- Engineered to prevent UV exposure
- Long UV tube life

### SPECIFICATIONS

Operating Voltage	240V 50Hz
Power Consumption	8 watts
Capacity	9 to 24 pins
UV Source Wavelength	253.7nm
UV Intensity	6.4mW/cm <sup>2</sup>
Tube Life	3000 hours
Dimension	21.7 x 8 x 6.8cm
Weight	670 grams

Cat. XE-4950 **\$99.50**  
Replacement tube  
Cat. XE-4951 \$19.95



## Remote Control Accessories for Operation of Car Alarms, Locking, etc.

This range consists of a key-fob type transmitter (Australian standard 304MHz, remote receiver and door lock actuators

### 12 Volt Door Lock Actuator (Master)

This solenoid device is especially designed for after-market installation. It is made of durable materials (fibreglass reinforced body, acetal resin gears) with an operational life of 30,000 times. Requires 5A @ 12V. Will give 2.8kg thrust (max) over 23mm. Fitted with a 5A microswitch which can be used to power slave actuators. Supplied with comprehensive kit of hardware fittings to connect to door lock hardware. Dimensions 145(L) extended body x 28(W) x 62(D)mm

Cat. LR-8816

**\$29.55**

### 12 Volt Door Lock Actuator (Slave)

Similar to above but with no microswitch.


Cat. LR-8817

**\$24.95**





## Resistors



COLOUR	FIGS	UNITS	MULTIPLIER	TOLERANCE
Black	0	1	0	20% (M)
Brown	1	10	10	1% (F)
Red	2	100	100	2% (D)
Orange	3	1000	-	-
Yellow	4	10000	-	-
Green	5	100000	-	-
Blue	6	1000000	-	-
Violet	7	-	-	-
Grey	8	-	-	-
White	9	-	-	-
Gold	-	-	0.1	5% (J)
Silver	-	-	0.01	10% (K)

## Resistors in Series



$$R \text{ TOTAL} = R1 + R2 + R3$$

## Resistors in Parallel



$$R \text{ TOTAL} = \frac{1}{\frac{1}{R1} + \frac{1}{R2} + \frac{1}{R3}}$$

## Ohm's Law

The relationship between resistance, voltage and current is defined by Ohm's Law.

The formulae are:

$$E = I \times R$$

$$I = E/R$$

$$R = E/I$$

where

E = volts

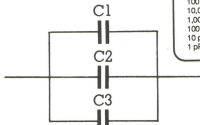
R = Resistance in ohms

I = Current in amps

An easier way to remember Ohm's Law is by this diagram. Just cover up the value you are looking for, and the formula shows.



## Capacitors in Parallel

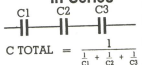


$$C \text{ TOTAL} = C1 + C2 + C3$$

## CAPACITOR MAGNITUDES

1,000,000 pF	=	1µor 1000nF
100,000 pF	=	0.1µF or 100nF
10,000 pF	=	0.01µF or 10nF
1,000 pF	=	as is (100pF)
100 pF	=	as is (10pF)
10 pF	=	as is (1pF)
1 pF	=	as is (1pF)

## Capacitors In Series



$$C \text{ TOTAL} = \frac{1}{\frac{1}{C1} + \frac{1}{C2} + \frac{1}{C3}}$$

## LEDs

Light emitting diodes are a special type of diode which lights up when a voltage is applied. They are available in red, green, yellow, orange and in various sizes and shapes. LEDs are polarised, and can be damaged by reverse connections. As a general rule, the longer lead is the positive (Anode).



Round Style LEDs

A Anode  
K Cathode



Rectangular Style LEDs

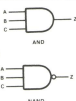
## Basic Logic Functions



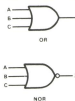
NOT



EXCLUSIVE-OR



AND



OR



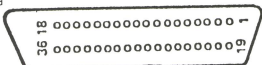
NAND



NOR

## Standard Centronics Printer Plug Connections

Pin No	Signal
19	Signal ground
2	Data bit 0
3	Data bit 1
4	Data bit 2
5	Data bit 3
6	Data bit 4
7	Data bit 5
8	Data bit 6
1	Data strobe
10	Data acknowledge
11	Input busy ready



## LEDs

COLOUR	RED	ORANGE	YELLOW	GREEN
VF (Typical)	1.8V	2.0V	2.1V	2.2V

Table 1: Typical forward voltage characteristics of standard LEDs with forward current set at 20mA.

## OPERATING DIRECTLY FROM 240V AC MAINS



The above circuit results in a LED current of approximately 15mA.

## OPERATING LED FROM ACV AS AN INDICATOR

$$R = \frac{0.5 (V_s - V_f)}{1f}$$

IN914



## OPERATING LED FROM DCV

$$R = \frac{V_s - V_f}{1f}$$

The two formulae shown should be used in conjunction with Table 1 to determine the required series resistor to operate LEDs at 20mA.

**TO: JAYCAR Pty Ltd P.O. Box 185 Concord 2137**

# ORDER FORM

Date In	Date Out	If you have a query quote this number	Prices	Assemblies
---------	----------	---------------------------------------	--------	------------

No:

Pricer	Assembler
--------	-----------

### Delivery Instructions

Heavy & Bulky items cannot be sent by post

- ☐ MAIL (see table below)
- ☐ AIRMAIL (add \$4 to P&P value)
- ☐ ROAD FREIGHT  
(\$13.50 anywhere in Australia up to 40kg)
- ☐ OVERNIGHT JET AIRFREIGHT  
(\$8 anywhere in Australia up to 3kg)
- ☐ TRANSIT INSURANCE  
(against loss or damage)  
(\$1 per \$100 goods value)

Date \_\_\_\_\_ Phone \_\_\_\_\_

Current Address, Please Print

Name

## Address

Postcode

Have you bought by Mail Order from us before? YES ☐ NO ☐  
IF YOUR ADDRESS HAS CHANGED PLEASE GIVE US YOUR OLD ADDRESS DETAILS

Please describe fully, if there is not sufficient room attach a neat list of the items you require.

## 14 DAY SATISFACTION GUARANTEE

Minimum order amount **\$10**

## OFFICE USE ONLY

**Back Order Advice**

Cat. No.	Qty.	Description	\$	¢	\$	¢	Supplied	Remarks	Delay Qty. Date
----------	------	-------------	----	---	----	---	----------	---------	--------------------

[illegible]

### Method of Payment

Cheque ☐

Money Order ☐

Credit Note ☐ No:

Amount

Bankcard ☐ Visa ☐ Mastercard ☐

American Express ☐

No:

Expiry Date

Signature \_\_\_\_\_

## SUBTOTAL

Post/Freight Charge

Reg/Insurance, etc

## SUBTOTAL

Less Credits

## TOTAL

## POST &amp; PACKING CHARGES

\$ 10 - \$24.99	_____	\$3.75
\$ 25 - \$49.99	_____	\$4.50
\$ 50 - \$99.99	_____	\$6.50
\$100 - \$198	_____	\$8.00

**IMPORTANT INFORMATION**  
OUT OF STOCK LINES: Items under \$10 are not back ordered. Please re-order in ONE month's time. A copy of this order is returned as your delivery advice. Note the column advising delay (in weeks) for items back ordered.

If your order is unusually bulky, heavy or fragile we may choose to send your goods to you by road at our expense. We cannot send goods by road to a P.O. Box however. If you feel your order may fit into this category, please include a delivery address - either work or home.

**MAIL INFORMATION:** Simply add the amount shown in the Post and Packing charges chart on the left. Don't forget to add extra amount for airmail or insured, if you require these services. These charges are for goods sent by **POST in Australia only - NOT AIRMAIL, OVERSEAS OR ROAD FREIGHT.**

**FINAL CHECK:** Please make sure that you have given full details of the products you require, the correct prices, the full postage or transport costs plus make sure that your **NAME AND ADDRESS** are legible. Your order will arrive faster if all details are correct.

If you are using credit cards be sure to include your full address.

## MAIL ORDER INFORMATION

**PRICES:** The prices in this catalogue are true and current at the time of going to press. Most of the information in this catalogue is for a considerable amount of time. Naturally, there will be factors beyond our control which will change our prices - either up OR down. We reserve the right to change prices when necessary without notice. If you order goods and the prices have changed the new price will be shown on the mail order form. If you are dissatisfied with the new price, please return the goods (in ORIGINAL CONDITION) for a full refund or credit (please specify) less P & P. For more information see "Satisfaction Guarantee".

## AVAILABILITY

We make every effort to ensure that goods in this catalogue are available by distribution date - March 1988. It is always wise to check by phone whether the goods you want are in stock. Our Mail Order Centre first to determine availability. We appreciate that this may be inconvenient but it is better to find out than travel a long distance to our store only to be disappointed when you get there. Note that we have 90% of our products ARE in stock at any one time, to be far more than the rest of the industry.

## CATALOGUE NUMBERS - ORDER FORMS

Our catalogue numbering system is designed to minimise the chances of errors or ambiguous descriptions. Please help us to do this by using them. Likewise, our order form is designed to help you get your order right the first time. A copy of our form is printed in this catalogue. If you do not wish to use the form in this catalogue then OK. If possible, photocopy the form or use a blank sheet of paper. If you use a blank sheet, make sure that all details required by the form are filled in. A spare mail order form will be sent to you when you receive your mail order. Mail order forms are available, post-free at no charge, on request.

## GOODS MISSING IN TRANSIT

By late the most common method of sending goods is by post. It is by far the most economical (see below \$50) and for parcels. We have dispatched over 90,000 postal items in the last 7 years and the number of items genuinely lost would represent less than 0.001% of this total. So, despite what the media says Australia that is NORMALLY very reliable. The only time items are missing is when there are industrial disputes, less than 1% of the time. It also gets a little slow at Christmas time but, as it is all hardly ever genuinely loses anything.

By and large other transport, i.e. road/rail, are very reliable as well. It must be emphasised, however, that our RESPONSIBILITY FOR THE GOODS CEASES the moment they are handed over to our specified carrier. We do not own the means of transport that gets the goods to you and have no control over them, and, as is normal in the transport industry, we cannot be responsible for them. We emphasise that loss of goods in transit is EXTREMELY RARE, however, ownership of the goods passes to you once we have handed them over to the carrier. If you do not wish to take this (admittedly small) risk, please specify insurance with your order. Insurance will cost you 1% of the value of the goods and we will arrange it for you. This insurance also covers goods DAMAGED in transit. If you order by phone you will be asked if you wish to insure on your order. Insurance will cost you 1% but every \$100.00 plus 5% PAINT THEREOF. In other words if you order for \$145.00 the insurance will be \$2.00.

If you do not wish to insure a statement saying "Insurance Declined" will appear on the order. If you post an order to us don't forget to consider insurance. We do not automatically insure unless you specify it. If you don't mention insurance you are NOT insured.

## DAMAGED GOODS

The same basic principle applies to goods damaged in transit as goods missing. If you suspect that the parcel has suffered to the point where the goods inside are damaged - do not open the parcel. Contact the nearest Post Office and deal directly with them. If the goods have been insured contact us.

## PAYMENTS

It is very easy to arrange payment for goods at Jaycar. 1. JAYCAR ACCEPTS BANKCARD (Australia and N.Z.) 2. VISA CARD (International) 3. MASTERCARD (International) 4. AMERICAN EXPRESS (International) Minimum order for the above cards is \$100.00. We do not accept other cards.

## SEE "ORDER BY PHONE"

5. CHECKS: You may not see a value of the total amount in your order. Many customers find it is convenient to leave the amount payable blank. When we calculate the correct amount, we will fill the correct amount in and advise you with a receipt. Don't forget, it is quite safe to leave the amount payable blank. Jaycar Pty Ltd and CROSSIT with the words "NON NEGOTIABLE". If you are a self-employed you can write on the top of the cheque "CHECKOUT NOT TO EXCEED \$XXX DOLLARS", allowing a margin over what you think the final sum will be. This sensible system saves us from issuing small credit notes or charging you for small amounts. We have not had a complaint from any of the many customers who have used this system over the years.

6. OTHER PAYMENTS: We accept Postal Notes (preferably in Australian currency), please do not send "CASH" (i.e. money from the post). Finally, we accept C.O.D. Jaycar works on low credit to the public prices and the high C.O.D. commission. This is the type of sale. For similar reasons, we cannot carry credit accounts.

## ORDERING BY TELEPHONE

Jaycar has never made it easier to order by Telephone. We have installed a toll-free telephone number. What does this mean? Well, if you live outside the Sydney Metropolitan area you would normally have to phone by STD. We don't believe that STD telephone charges are at all expensive but even so they are. If you wish to order on our 008 022 888 order line you only pay for the cost of a local telephone call. You can even call us and mail order from anywhere in Australia from a public phone. We accept toll-free line calls and accept either Bankcard, Visa, Mastercard or American Express card number and we will take care of the rest. Note that our toll-free line to be very busy so please limit your calls on this line to ORDERS ONLY. If this telephone number is engaged if you want to make a general or order enquiry you can remove mail order hot line 02 747 1888. You should always be able to get through on this number.

## ORDER BY FAX

Simply write your order out (either on a sheet of paper or one of our forms) and send it to us from your FAX machine. Our FAX number is (02) 744 0767 and is on line 24 hours a day 365 days of the year. Note that you can Tellex your order to us as well as AA 72293.

## MANUFACTURERS/AGENTS GUARANTEES

1. For goods supplied to us in Australia we will honour the local suppliers guarantee. This is generally 90 days. 2. For Jaycar direct import goods, we generally offer a 90 day guarantee as well. If you wish to check this, we are only too happy to provide you with the information. 3. Kit guarantees: If we were to add a guarantee to kits two things would occur.

(i) The price of the kit would increase significantly. (ii) The average consumer would object as they would be heavily subsidising the total number of kits that we are offering on discounted prices in the first place. (Remember satisfaction guarantee).

Most kits are successfully constructed with few problems. Let's get it straight. Jaycar guarantees that all kits contain brand new components of the best commercial quality. The individual parts are therefore guaranteed. However, we have very little say of verifying whether the fault was caused by you or our supplier. The supplier will not then honour guarantee. So, if you suspect that a part is faulty (perhaps it looks crunched) send it back to us. We will more than replace it immediately.

The fault is generally a basically a matter of common sense. We guarantee the parts but obviously CAN'T guarantee how well you put the kit together.

The Jaycar Electronics repairs designs before deciding whether to produce a kit for a project. This screening process helps to provide further assurance that only reliable orders are accepted.

4. SEMICONDUCTOR GUARANTEE: Jaycar only buys semiconductors from the major reputable manufacturers among which are: Motorola, Texas Instruments, National Semiconductor, RCA, Raytheon, Philips/Sigroplex, Sams, Hitachi and Mitsubishi. Because they have a high reputation to maintain, they produce the quality control on their products. Our chances of receiving faulty products are therefore very small. Because Jaycar has no control over the end-use of the component the manufacturer generally will not enter a warranty claim. But BECAUSE we only buy quality products of experiencing a faulty component are virtually zero.

## EXCLUSIVE

## FREE SEMICONDUCTOR INSURANCE 12 MONTHS WARRANTY ON SEMIS!

You may have a very good reason to believe that you have a faulty semiconductor which was purchased from us either as part of a kit or discrete form. After you have double (triple) checked that your circuit is OK, contact us. We need to know the following:

- Date of purchase
- Place of purchase - i.e. shop or mail order
- Your name and full address
- Full details of what testing procedures you have taken to establish where the fault lies
- Vague testing procedures you have taken for MOSCMOS devices

If you are writing to us you may include the suspect device securely packed as well as proof of purchase. If you are ringing in, we may ask you to send the part later. In any case we must have proof of purchase from us when you claim.

If we find that your claim is valid Jaycar agrees to provide an exact or reasonable equivalent replacement. This offer is valid for 12 months from receipt of the original goods. All claims are subject to an insurance excess of 40% of the value of the goods, i.e. if the component is valued at \$1.00 the excess which you must pay is 40c. Normal post and packing charges apply as well.

We believe that this policy is a breakthrough for the semiconductor. The policy is designed to help the home hobbyist and consumer and does not apply to volume purchases of SEMIS, etc.

## OEM QUANTITY PRICE/SALES TO DEALERS

Jaycar is a franchised distributor of several products notably among which is ITT Cannon components. We also are a dealer in many other products such as Laser Digital PDA, Memos, etc. We welcome OEM enquiries for purchases of components in quantity. Generous discounts apply and normally good prices. Telephone 02 747 2822 and ask for BRUCE or GARY for details. We are also in a position to supply dealers/resellers across Australia.

## FREIGHT

Warranty repair or replacement for goods other than semiconductors is naturally done free of charge. The freight charges, however, are not. The customer is required to pay freight from our service department. This is standard commercial practice.

## SALES TO SCHOOLS, GOVT. DEPTS., PUBLIC COMPANIES, etc.

Jaycar is quite happy to provide ACCOUNT FACILITIES for the following:

- All schools (Government and non Government)
- All CAE's, Colleges, Universities, etc.
- All State & Commonwealth Govt. Depts. including research institutions
- All mining companies
- All TV and radio stations
- All public i.e. "LTD NOT 'PTY. LTD'" companies
- If you are one of the above you can buy from Jaycar on 30 day credit from invoice account. The invoice will go with the goods or to your accounts payable office (nominate). You can make further savings if your organisation can buy sales tax exemption or tax number. You can telephone, telefax or fax your order to us as well.

NOTE: because of the TREMENDOUS AMOUNT of paperwork we must complete for the Australian Taxation Office, (see how to PAY the tax first and then claim a refund) we must install on a minimum 14c free order form. This amount is a \$30.00 minimum order with a \$10.00 per line minimum.

## NEW ZEALAND & OTHER OVERSEAS ORDERS

We are quite happy to take telephone or postal orders from New Zealand. As a matter-of-fact, direct shipments to New Zealand are Australian sales tax free and the savings can be considerable. Because the forwarding costs are different we must install on the postage and write for a quote for other forms of freight. As a guide, please add 50% to our normal post and packing charges for surface mail freight. Minimum sea freight \$10.00 per item plus minimum \$30 value.

## PHONE ENQUIRIES

DIAL (02) 747 1888

## WRITTEN ENQUIRIES

If you wish to enquire about the whereabouts of your mail order please give the following details:

- Your full name
- Your delivery address including postal code
- The mail order reference number, if you have it
- If the goods were paid for by the courier, the relevant cash or cheque number and the date
- A brief description of the goods, with catalogue numbers if possible

The above apply whether writing or phoning in. If you phone in you will be asked to ring back in 15 - 20 minutes. This saves you the expense of waiting while we locate your order.

## SATISFACTION GUARANTEE

We are very proud of the goods we sell and are very confident that you will be satisfied with your purchase.

If you have purchased goods that qualify for this guarantee personally from one of our stores we will credit you \$20 by a company cheque, or full credit card \$30 in the shop PROVIDED that you have returned the goods in original condition. If you return the order packaging, if any, must be unopened. You must have evidence of receipt of purchase i.e. sales docket and/or cash register receipt.

Please do not ask for a refund AFTER 7 days from purchase date. If you have purchased goods by mail order, we offer the same guarantee but for 14 days from purchase date. (This allows for transport delays).

In the case of mail orders we cannot refund post and packing or other transportation charges.

- Goods not covered by policy: Many semiconductors
- All books - All computer software

Please do not ask for a refund if you have no evidence of purchase from us, so keep your sales dockets.

## CAREER OPPORTUNITIES WITH JAYCAR

We are not the biggest but we reckon we are the BEST. If you have an outgoing personality and have a keen interest in electronics with a sound knowledge, we would like to hear from you. We have an ongoing training program for "Retail Junior Store Manager".

If interested (no obligation) contact:

THE PERSONNEL OFFICER  
JAYCAR ELECTRONICS Pty. Ltd.  
P.O. BOX 185  
CONCORD, 2137

## MANUFACTURERS EXCESS STOCK

NOTE: In order to remain competitive and keep abreast of current technology, manufacturers of electronic equipment must continually upgrade their designs. This sometimes necessitates making redundant perfectly good components or equipment in previous designs. If you, as a manufacturer, are in this position, Jaycar may be able to help you. We purchase manufacturers stock, surplus to their requirements. This may include any type of new electronic components, individual components, sub-assemblies, etc. even sub-assemblies and completed equipment. We pay cash for good quality prime spec parts!

## CALL GARY JOHNSTON OR BRUCE ROUTLEY NOW ON

(02) 747 2822

## FAX YOUR PARTS LIST/COMPUTER PRINT OUTS TO US ON

(02) 744 0767

[illegible]





**Above:** Artists impression of our new Head Office & warehouse due for completion in 1989

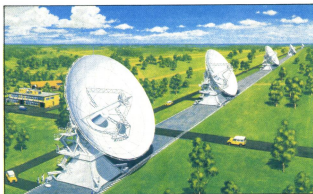
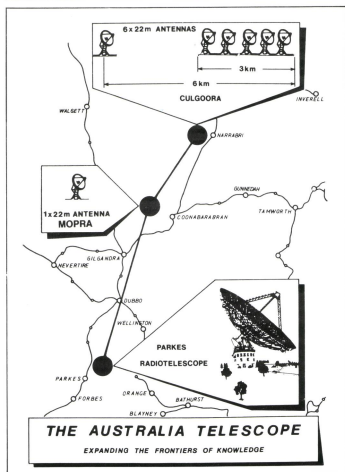
**Right:**

Somewhere in the Queensland outback! Our trusty 1965 AP-5 Valiants made it through the 1987 Bourke to Barrier Reef Bash unscathed! Once again the Charity event raised an enormous amount of money — over \$800,000 for the childrens' charity, The Variety Club of Australia. We once again wish to thank our local electronics suppliers for helping us enter the vehicles.

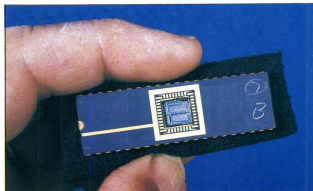
Unfortunately we narrowly lost the event but confidently expect to win this year.

**Above Right:**

Australian Geographics "Team Marsupial" Solar Car on the road to Adelaide during the 1987 World Challenge. Jaycar was a sponsor of this entry. Lascar DPM's were used by "Team Marsupial" along with Jaycar/Metex multimeters etc., with great success. Team Marsupial finished 4th and was the first car with the Australian made solar cells to finish. Cloudy skies didn't help.



Artist's Impression of the Compact Array of the Australia Telescope, Culgoora, NSW.



Correlator Chip 5mm square, contains over 50,000 transistors.



**SYDNEY (Showrooms):** 117 YORK STREET  
PHONE: (02) 287 1614



**BORE HILL:** 188-192 PACIFIC HIGHWAY (Cnr BELLEVUE AVENUE) PHONE: (02) 439 4799



**HURSTVILLE:** 121 FOREST ROAD PHONE: (02) 570 7000



**CARLINGFORD:** Cnr CARLINGFORD & PENNANT HILLS ROAD PHONE: (02) 872 4444



**CONCORD:** 115-117 PARRAMATTA ROAD  
PHONE: (02) 745 3077



**BRISBANE:** 144 LOGAN ROAD BURANDA  
PHONE: (07) 393 0777



**Melbourne:** 45 A'Beckett Street, City  
(03) 663 2030



**Springvale:** 887-889 Springvale Road  
(03) 547 1022



Inside shot of our A'Beckett Street store



Inside shot of our Springvale Store.

## JAYCAR — HERE TO SERVE YOU

**HEAD OFFICE:**  
115-117 Parramatta Rd,  
Concord NSW 2137  
P.O. Box 185  
Concord NSW 2137  
Phone: (02) 747 2022  
Telex: 72293  
Fax No. (02) 744 0767  
Mail Order Hotline: (02) 747 1888  
Order Line: 088 022 888

